

R E P O R T R E S U M E S

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FEASIBILITY OF COMMUNITY COLLEGES IN HAWAII.

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HAWAII UNIV., HONOLULU

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POPULATION GROWTH, ECONOMIC FACTORS, AND EDUCATIONAL NEEDS PROVIDE JUSTIFICATION FOR A COMMUNITY COLLEGE SYSTEM AS THE MOST EFFECTIVE MEANS OF MEETING HAWAII'S NEEDS IN POSTSECONDARY EDUCATION. THE COORDINATED COMMUNITY COLLEGE SYSTEM WILL ATTEMPT TO MEET NEEDS ON A STATEWIDE RATHER THAN ON A LOCAL BASIS. ALTHOUGH FINANCED FROM STATE SOURCES AND UNDER THE DIRECTION OF A STATE-LEVEL BOARD, THE COLLEGES WILL NOT ALL BE ALIKE, ESPECIALLY IN TERMS OF NUMBER AND VARIETY OF PROGRAMS. ADMINISTRATIVELY, THE SYSTEM SHOULD BE PLACED UNDER THE BOARD OF REGENTS OF THE UNIVERSITY OF HAWAII. TWO ALTERNATIVES ARE GIVEN--SUPERVISION BY THE STATE BOARD OF EDUCATION OR BY A NEWLY CREATED BOARD FOR COMMUNITY COLLEGES. PUBLIC TECHNICAL SCHOOLS SHOULD BE CONVERTED INTO COMMUNITY COLLEGES. A COMPREHENSIVE CURRICULUM WILL OFFER TRANSFER, TECHNICAL-VOCATIONAL, CONTINUING, AND GENERAL EDUCATION PROGRAMS. IDEALLY, THE COMMUNITY COLLEGE SHOULD BE TUITION-FREE. HOWEVER, IN VIEW OF THE STATE'S ECONOMY AND THE COSTS OF ESTABLISHING COMMUNITY COLLEGES, INITIAL TUITION WILL BE SET AT \$130 A YEAR. DETAILED STATISTICAL INFORMATION IS PROVIDED. (HS)

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**FEASIBILITY OF
COMMUNITY COLLEGES
IN HAWAII**

**COMMUNITY COLLEGE STUDY PROJECT
UNIVERSITY OF HAWAII
HONOLULU, HAWAII 96822**

UNIVERSITY OF CALIF.
LOS ANGELES

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CLEARINGHOUSE FOR
JUNIOR COLLEGE
INFORMATION

JC 660 349

Feasibility of
COMMUNITY COLLEGES
In Hawaii

Richard H. Kosaki
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Community College Study Project
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HOUSE RESOLUTION

RELATING TO THE DEVELOPMENT OF A SYSTEM OF COMMUNITY COLLEGES.

WHEREAS, the future needs of higher education for the youth of Hawaii mandate that attention be given to the facilities which will be available for such education; and

WHEREAS, the University of Hawaii's Manoa campus is not large enough to serve the future needs of all of Hawaii's youth who will desire and be able to profit from a college education; and

WHEREAS, it would be economically beneficial for many of Hawaii's youth if they could attend a college located nearer to their home; and

WHEREAS, a system of community colleges affords one of the best opportunities to provide a wider range of educational opportunities and programs, some leading to the awarding of academic degrees, others to diplomas and some to certificates of proficiency; and

WHEREAS, an enterprise of this magnitude calls for the careful development of plans and their skillful implementation; now, therefore,

BE IT RESOLVED by the House of Representatives of the Second Legislature of the State of Hawaii, General Session of 1963, that the University of Hawaii be and hereby is requested to develop plans for implementing a state-wide community college system, using the funds provided in H. B. 1, H. D. 1, S. D. 2, C. D. 1 and any other available funds, and to report its findings, plans and recommendations to the legislature no later than twenty days prior to the beginning of the Budget Session of 1964; and

BE IT FURTHER RESOLVED that duly authenticated copies of this Resolution be forwarded to the President of the University of Hawaii.

(Adopted May 3, 1963)



UNIVERSITY OF HAWAII • HONOLULU, HAWAII 96822

THE PRESIDENT

TO MEMBERS OF THE SECOND STATE LEGISLATURE

I submit herewith a report on community colleges requested by House Resolution No. 245 and made possible by an appropriation contained in Act 201 of the 1963 session.

In order to outline plans for a statewide community college system, as requested by the House Resolution, it was necessary to review in some detail the existing facilities and needs for post-high school education in the State. The report discusses alternatives other than that of community colleges to meet these needs. The reasons for recommending a community college system are presented in Chapters IV and VI.

This report is a feasibility study and has not yet been acted upon by the Board of Regents of the University of Hawaii. I hope that this report will be helpful to members of the Legislature in reaching a decision on an important aspect of education in the State.

Respectfully submitted,

Thomas Hale Hamilton
President

February 1, 1964

ACKNOWLEDGMENTS

The completion of this report in the limited time available is due to the kind assistance of many individuals.

Information on educational characteristics of the State pertinent to the study was supplied by the following: Yeuell Y. Harris, Jiro Matsui, Albert J. Feirer, Lucian J. Paulus, and James Le Vine of the Department of Education; and Willard Wilson, Edward T. White, Edmund F. Spellacy, and Jeffrey A. Fleece of the University of Hawaii. The successful completion of a rather extensive questionnaire to high school seniors in the State is due to the excellent cooperation of all the public and private high school administrators and teachers.

Many interviews and conferences were held with the political, educational, and civic leaders of the State. Especially helpful in making the necessary arrangements on the neighbor islands were Kaoru Noda, Meyer M. Ueoka, and Morris S. Shinsato.

Mainland community college developments were discussed with Edmund J. Gleazer, Jr., Leland L. Medsker, B. Lamar Johnson, James L. Wattenbarger, S. V. Martorana, O. W. Noble, Calvin C. Flint, and James W. Thornton, Jr., most of whom were imposed upon during visits to Honolulu sometime during the period of the study. Twenty campuses in eight states were visited by the author of this report; information received from and courtesies extended by these institutions are gratefully acknowledged.

A panel of University of Hawaii professors assisted in the conduct of research for this report: Shiro Amioka, George Y. Fujita, Teruo Ihara, and Marvin F. Poyzer. The high school survey results were processed at the University of Hawaii Statistical and Computing Center by Walter S. Yee.

The project owes special thanks to Jean Fujinaga, research assistant, Helen Domai, secretary, and Joyce Nakahara, student assistant, who labored tirelessly and cheerfully against the odds of endless tasks and too little time. Mildred D. Kosaki was a partner in this enterprise.

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Honolulu, Hawaii
January 1964

TABLE OF CONTENTS

	<u>Page</u>
H. R. 245, Relating to Community Colleges.	ii
Letter of Transmittal.	iii
Acknowledgments.	iv
I. INTRODUCTION	1
II. GENERAL BACKGROUND	3
Geography	3
Population.	4
Secondary and Post-Secondary Education.	6
Economic Factors.	35
III. HAWAII'S HIGH SCHOOL SENIOR CLASS OF 1964.	40
Background of the Questionnaire	40
Pertinent Findings.	43
Summary of Responses to Community College Enrollment.	59
IV. MEETING HAWAII'S NEEDS FOR POST-SECONDARY EDUCATION.	61
Focus on Needs.	61
Desirable Features of a System to Meet Needs.	64
Alternative Plans for Meeting Hawaii's Needs.	65
V. THE COMMUNITY JUNIOR COLLEGE: ITS GENERAL NATURE AND ITS HISTORY IN HAWAII.	69
Its General Nature.	69
Growth and Expansion in the United States	72
Junior Colleges and Hawaii.	73
VI. A STATEWIDE COMMUNITY COLLEGE SYSTEM FOR HAWAII.	80
Major Features of the Proposed System	80
Community College Plans for Each District	91
Financing	96
Summary of Recommendations.	97
Implementation of the Proposed Plan	98
FOOTNOTES.	100
APPENDIX A. High School Senior Questionnaire.	103

Tables

1. Population of Hawaii, By County.	4
2. Estimated Population of Hawaii	5
3. Age Groupings of the Population of Hawaii.	5
4. Estimated High School Senior Enrollments in Hawaii, By County. . .	8
5. Post-High School Educational Plans of High School Seniors, By Types of Institutions	10
6. Post-Graduation Plans and Actual Activities of Hawaii's Public and Non-Public High School Graduates in Selected Years. . .	12
7. Post-Graduation Educational Activities of Hawaii's High School Graduates One Year After Graduation in Top Three Quintiles of Standing in Class, Expressed in Percentages.	13
8. Full-Time Student Enrollments in Hawaii's Public Technical Schools, By School	15

	<u>Page</u>
9. Full-Time Student Enrollments in Hawaii's Public Technical Schools, By Vocational Area and Course Concentration.	16
10. Number of Students Who Applied and Who Enrolled in Hawaii's Public Technical Schools, By School and Vocational Area	18
11. Number of Graduates of Hawaii's Public Technical Schools, By Vocational Area and Course Concentration	21
12. Post-Graduation Activities of Hawaii's Public Technical School Graduates, By School	22
13. Degree-Credit Enrollments in Hawaii's Colleges, By Institution. . .	24
14. Actual and Projected Enrollment of Classified and Unclassified Undergraduates, University of Hawaii.	25
15. Actual and Projected Enrollment of Classified and Unclassified Graduate Students, University of Hawaii	26
16. Actual and Projected Daytime Degree-Credit Enrollment, University of Hawaii, Including Estimated Full-Time Equivalent (FTE) Students.	27
17. Number and Percentage of Hawaii's High School Seniors Who Applied, Were Accepted for Enrollment, and Actually Registered at the University of Hawaii, By Districts	29
18. Student Enrollment in the Adult General Education Program of the Department of Education, By Type of Class	31
19. Credit and Non-Credit Student Enrollments On and Off Campus in the College of General Studies, University of Hawaii.	34
20. Estimates of Labor Force in Hawaii, By Industry Group	36
21. Hawaii's High School Seniors in Public and Non-Public High Schools, By District.	42
22. Parental Occupations of Hawaii's High School Seniors, Class of 1964, By Occupational Grouping	51
23. Community College Attitudes of Hawaii's High School Seniors Who Intend to Continue Their Education, Class of 1964, By Type and Location of School.	55
24. Community College Attitudes of Hawaii's High School Seniors, Class of 1964, By Selected Field of Study	59

Figures

1. Geography and Population of Hawaii, 1960.	3
2. Hawaii's High School Graduates by County, 1954 to 1963.	7
3. Post-Graduation Plans of Hawaii's High School Graduates, 1952 to 1963.	9
4. Educational Levels by Age Groups.	30
5. Employment in Hawaii by Occupation, 1950 and 1960	35
6. Per Cent Change in Employment in the United States by Occupation Group.	38
7. Community College Attitudes by Type of School	43
8. Community College Attitudes by District	45
9. Community College Attitudes by Sex.	46
10. Community College Attitudes by Average High School Grades	47
11. Community College Attitudes by High School Course Concentrations. .	48
12. Course Concentrations by Community College Attitude	49
13. Community College Attitudes by College Concern.	50
14. Community College Attitudes by Number of Family Dependents.	53
15. Community College Attitudes by Certainty of Educational Plans . . .	54

Chapter I

INTRODUCTION

Education is important in any modern society, whatever its political or economic forms. But a society such as ours, dedicated to the worth of the individual, committed to the nurture of free, rational and responsible men and women, has special reasons for valuing education. Our deepest convictions impel us to foster individual fulfillment. We wish each one to achieve the promise that is in him. We wish each one to be worthy of a free society, and capable of strengthening a free society.

. . . .

Ultimately, education serves all of our purposes--liberty, justice and all our other aims--but the one it serves most directly is equality of opportunity. We promise such equality, and education is the instrument by which we hope to make good the promise. It is the high road of individual opportunity, the great avenue that all may travel. . . .

John W. Gardner

These words are especially meaningful to the State of Hawaii. In few states has education had to meet the challenges of preparing free citizens and succeeded so well; in few societies has education meant so much to so many who were of diverse cultural and linguistic backgrounds; and in few communities is education so valued and appreciated as in the Islands of Hawaii.

Since annexation to the United States in 1900 to the attainment of statehood in 1959, Hawaii has been served well by a rapidly developing system of education based chiefly on American practices. Hawaii has faced the problem of increasing the opportunities for free public education from the kindergarten to the comprehensive high school, and now, like the rest of the nation, is wrestling with the problem not only of improving primary and secondary education but also of offering opportunity of sufficient quantity and quality in higher education.

A concern for higher education in Hawaii prompted the Legislature to authorize a statewide survey in 1961. The survey, conducted by a team from the U. S. Office of Education, Department of Health, Education, and Welfare (HEW), indicated the need for increasing higher education opportunities throughout the State and recommended that a system of community colleges be established. Acting on this suggestion, the 1963 Legislature appropriated funds to the University of Hawaii for "plans for the establishment of a Statewide Community College system" (Act 201). The House of Representatives adopted a resolution requesting the University "to develop plans for implementing a state-wide community college system . . . and to report its findings, plans and recommendations to the Legislature no later than twenty days prior to the beginning of the Budget Session of 1964" (H. R. 245).

During the 1963 session, several bills authorizing the establishment of community or junior colleges in the State were introduced, including some which would have adopted the recommendations of the HEW report, but none of these was passed. Thus, the Legislature, in essence, chose to give the matter further study in the hope that plans based on a more detailed analysis of needs and prospects will contribute to a sound decision on this matter. This report attempts to supply information that will be helpful in making that decision.

Chapters II and III of this report detail needs which may be met by additional higher education facilities. Population and economic trends are briefly reviewed. Major attention is given to the plans and activities of Hawaii's recent high school graduates; the annual reports, since 1952, of the Joint Committee on Guidance and Employment of Youth as well as the HEW report were invaluable sources of relevant data. Detailed information on the plans of present high school seniors, including their attitudes toward public two-year colleges in Hawaii, was secured through a special questionnaire designed for this study.

Chapter IV lists three basic approaches for meeting post-high school educational needs in Hawaii. A system of community colleges for the State is recommended, and in Chapter V the nature of the community junior college and Hawaii's experience with the junior college idea are briefly discussed. The major characteristics of the system recommended for Hawaii are outlined in Chapter VI.

Chapter II

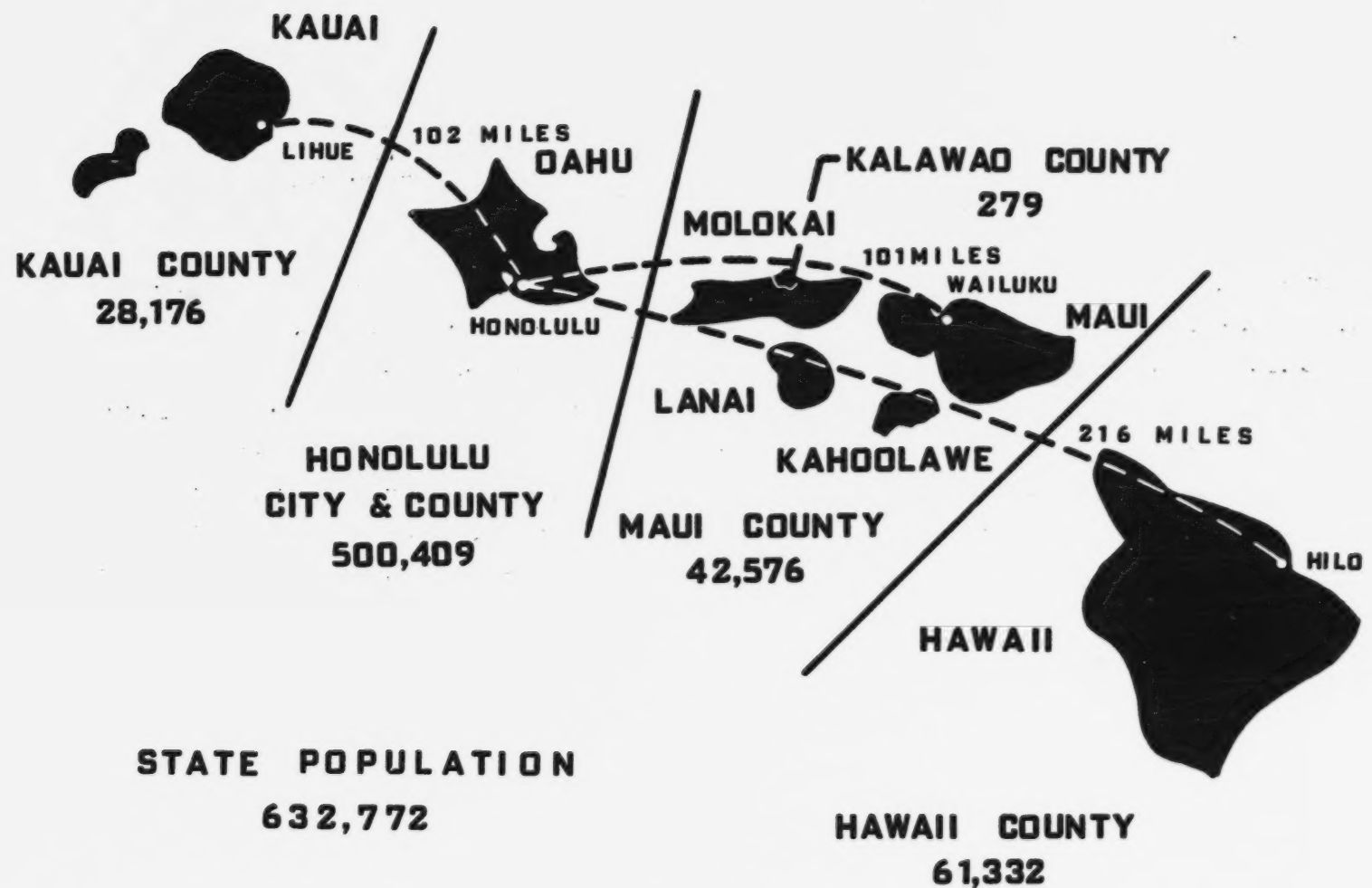
GENERAL BACKGROUND

Several salient features of Hawaii are briefly presented in this chapter--geography, population, secondary and post-secondary education, and economic factors. Wherever possible, discussion on future developments in terms of projections or possibilities is included.

Geography

Geography and population are basic factors for consideration, and in Hawaii they take on additional significance. The insular nature of the State presents problems in transportation and communication (see Figure 1).

figure 1
**GEOGRAPHY AND POPULATION
OF HAWAII
1960**



Population

Two aspects of population are discussed in this section: (a) geographical distribution and (b) age groupings.

Geographical Distribution

From 1950 to 1960, the population of Hawaii increased 26.6 per cent, from 499,794 to 632,722. However, this does not represent a statewide growth, for during this period, the populations of the neighbor island counties declined, while Oahu alone experienced an increase of almost 42 per cent (see Table 1).

Table 1
POPULATION OF HAWAII, BY COUNTY
1950 and 1960

County	Years		Per Cent Change
	1950	1960	
THE STATE	499,794	632,772	+26.6
Hawaii	68,350	61,332	-10.3
Honolulu	353,020	500,409	+41.8
Kauai	29,905	28,176	- 5.8
Maui	48,519	42,855	-11.7

Source: U. S. Bureau of the Census, County and City Data Book, 1962; A Statistical Abstract Supplement (Washington, D. C.: Government Printing Office, 1962). p. 82.

Many and varied population projections for the State are available. Recent estimates of future growth for Oahu and the neighbor islands combined were formulated by the State Department of Economic Planning and are presented in Table 2. The data indicate that, based on 1960 population figures, Oahu in 1972 will have an increase of 28.2 per cent in population; the neighbor islands, 9.8 per cent; and the State, 24.4 per cent. The estimated increases for Oahu and the State are less than those for 1950 to 1960, but the neighbor islands, instead of continuing a population decline, are expected to experience a population growth.

Table 2
ESTIMATED POPULATION OF HAWAII
1963 to 1972

Year (Jan. 1)	Population		STATE
	Oahu	Other Islands	
1963	567,921	129,082	697,003
1964	576,100	130,900	707,000
1965	584,400	132,700	717,100
1966	592,600	134,500	727,100
1967	600,800	136,300	737,100
1968	609,100	138,100	747,200
1969	617,300	140,000	757,300
1970	625,500	141,800	767,300
1971	633,700	143,600	777,300
1972	642,000	145,400	787,400

Source: Hawaii, Department of Economic Development, "Population Projections for Hawaii, 1963-1983" (May 24, 1963), p. 11. (Mimeographed.)

Age Groupings

According to the 1960 U. S. Census, Hawaii's population is relatively young (see Table 3). Slightly over two-fifths of the people are under 20 years of age. The U. S. Census also indicates that in 1960 Hawaii's median age was 24.3 years; the nation's was 29.5 years. The median ages for the counties were: Hawaii, 27.4; Honolulu, 23.8; Kalawao, 44.5; Kauai, 29.6; and Maui, 28.2.

Table 3
AGE GROUPINGS OF THE POPULATION OF HAWAII
1960

Age Groupings	Number in Hawaii	Per Cent of Hawaii Total	Per Cent of U. S. Total
0 to 19	272,579	43.1	38.5
20 to 39	193,340	30.5	25.7
40 to 64	137,691	21.8	26.6
65 and over	29,162	4.6	9.2

Source: U. S. Bureau of the Census, U. S. Census of Population: 1960; General Social and Economic Characteristics, Hawaii, Final Report PC(1)-13C (Washington, D. C.: Government Printing Office, 1962), p. 13-49.

This relative youthfulness of Hawaii's population has direct implications for the State's educational system. In a consideration of higher education facilities, special attention should be focused on the age group between 18 and 21 years. This group totaled 43,312 in Hawaii in 1960 and is estimated to increase, like the rest of the nation, by 48.1 per cent to 64,145 in 1970.¹

Secondary and Post-Secondary Education

The following aspects on secondary and post-secondary education in Hawaii are pertinent to this study: (a) high school graduates, their post-graduation plans and activities; (b) public technical schools--their enrollments, course concentrations, application-acceptance rates, post-graduation activities of graduates, and apprentice and part-time programs; (c) college degree-credit enrollments with special attention to the application-acceptance rates and attrition rates at the University of Hawaii; and (d) public adult education programs.

High School Graduates

The number of high school graduates in Hawaii has increased from 5,872 in 1954 to 9,464 in 1963, an increase of 61.2 per cent over the last decade (see Figure 2). Most of the increase was on the island of Oahu whose rate of increase during this same period was 76.3 per cent; Hawaii, 36.3 per cent; Maui, 30.6 per cent; and Kauai, 15.7 per cent.

The HEW 1962 report includes projections of high school senior enrollments in Hawaii from 1962 to 1972. Two sets of projections are made, and Table 4 presents the figures which are considered "more realistic" by the HEW survey team because a one per cent annual increase in retention rate is included. In 1972 a total of 14,119 students is expected to be enrolled as high school seniors, an increase of 41.6 per cent over 1962 figures. This projected increase is based on the expected growth of the City and County of Honolulu. The projected enrollments for the remaining three counties are estimated as being fairly stable during the period 1962-72.

These projections of Hawaii's total population and of high school enrollments indicate the potential demand for opportunities in higher education. This potential demand takes on larger and more significant dimensions when one considers the factor of sheer numbers of students and the desire to go to college on the part of an increasing proportion of Hawaii's high school seniors.

Post-Graduation Plans -- Data on this important aspect are available since 1952 due to the efforts of the Joint Committee on Guidance and Employment of Youth. Annually the Joint Committee has sponsored the administration of questionnaires to the State's high school seniors to ascertain their post-graduation plans. The annual reports of the Committee indicate a noticeable rise in the numbers and percentages of those who plan to continue their education after graduation from high school (see Figure 3).

figure 2
HAWAII'S HIGH SCHOOL GRADUATES, BY COUNTY
1954 TO 1963

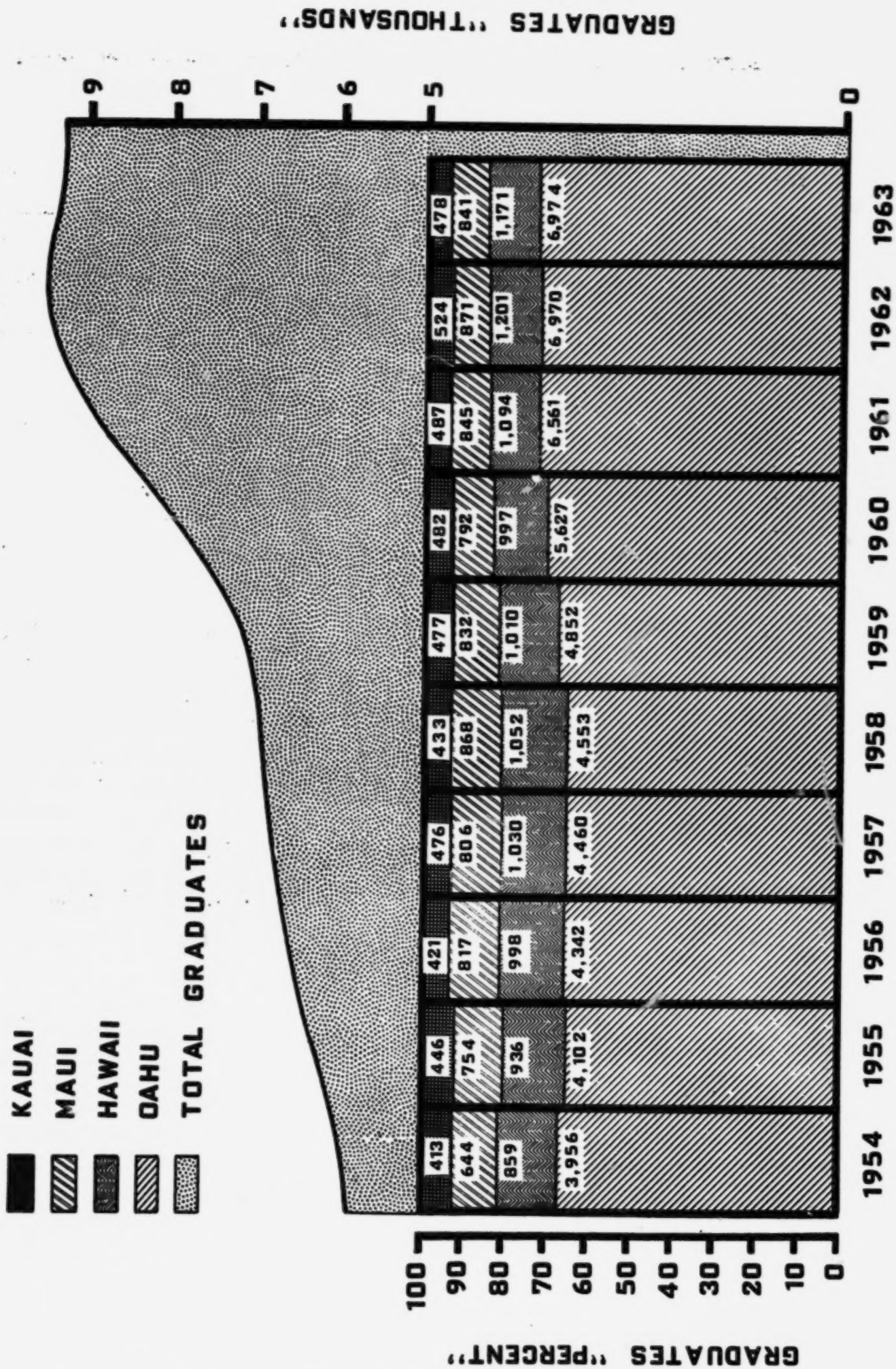


Table 4

ESTIMATED HIGH SCHOOL SENIOR ENROLLMENTS IN HAWAII, BY COUNTY
1962 to 1972

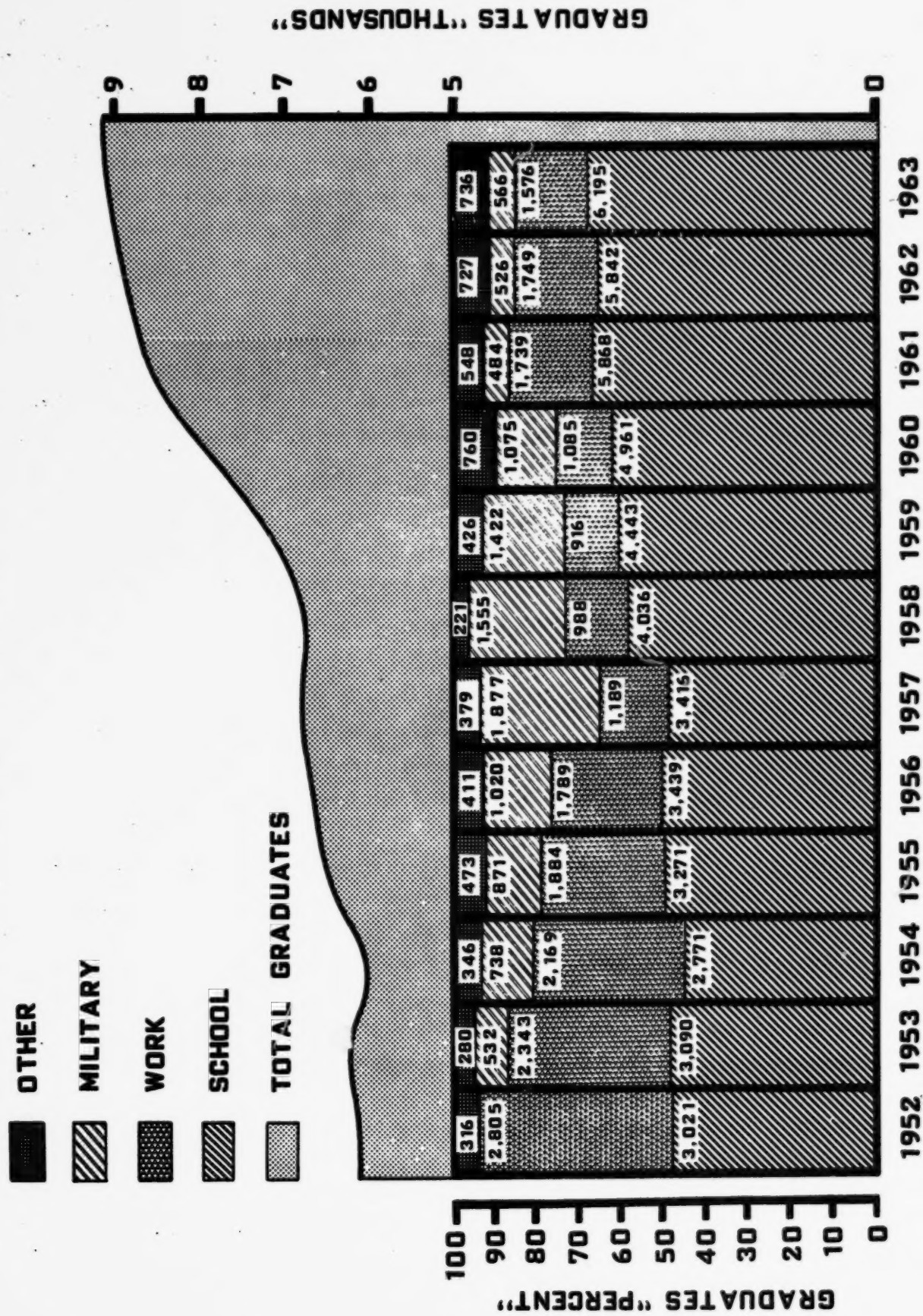
Year	County				STATE*
	Hawaii	Honolulu	Kauai	Maui	
1962**	1,183	7,194	554	900	9,890
1963	1,141	7,436	508	830	9,945
1964	1,134	7,990	488	832	10,451
1965	1,176	8,702	572	899	11,352
1966	1,211	8,631	571	864	11,281
1967	1,194	9,071	535	850	11,632
1968	1,210	9,444	523	881	12,030
1969	1,238	9,681	562	865	12,316
1970	1,164	10,567	593	855	13,112
1971	1,211	11,036	538	836	13,536
1972	1,243	11,595	541	837	14,119

Source: U. S. Office of Education, The University of Hawaii and Higher Education in Hawaii (Report of a Survey), by S. V. Martorana, Ernest V. Hollis, and Staff Members of the Division of Higher Education (Honolulu: Department of Budget and Review, November 1962), pp. 31-32, 281.

* The State total was computed separately and may not be equal to the sum of the earlier four columns.

** The actual enrollment for the State in 1962 was 9,969; 8,162 were in public and 1,807 were in private schools (Hawaii, Department of Education, Research and Statistics Branch, Statistics on Pupil Membership, Circular No. 6 (April 1962), pp. 8 and 19. (Mimeographed.)

figure 3
POST-GRADUATION PLANS OF HAWAII'S
HIGH SCHOOL GRADUATES - 1952 TO 1963



Source: Joint Committee on Guidance and
 Employment of Youth, Annual Reports.

Figure 3 vividly portrays how the educational aspirations of Hawaii's high school graduates have risen, particularly during the last five years. In 1963, 68 per cent of all graduates expected to continue their schooling; in 1958, this proportion was 59 per cent; in 1952, 49 per cent. The proportion of seniors who planned to go to work immediately after graduation declined from 46 per cent in 1952 to only 17 per cent in 1963. The number and proportion of students who anticipate going into the military declined rather sharply during the last three years although there are rather striking differences among the counties.

A further exploration of the plans of students who intended to continue their education beyond high school indicates that in 1963 half of these students plan to attend a four-year college; this is quite a decrease from the proportion who intended to do so in 1957 (see Table 5). From 1959 to 1961 the proportion planning to attend junior colleges declined from 8 to 4 per cent due probably to the development of Church College and Chaminade College as four-year institutions; during the last two years this percentage remained at 5. During the last six years approximately one-third of the seniors who had educational plans chose to attend business, technical, nursing, or other specialized schools.

Table 5
POST-HIGH SCHOOL EDUCATIONAL PLANS
OF HIGH SCHOOL SENIORS, BY
TYPES OF INSTITUTIONS
1957 to 1963

POST-HIGH SCHOOL EDUCATIONAL PLANS									
Year	Four-Year Colleges		Junior Colleges		Business, Technical, and Nursing Schools		Other Schools or Not Decided		Total
	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	
	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	
1957	2,339	69	283	8	787	23	7	1*	3,416
1958	2,460	61	268	7	1,271	31	30	1	4,019
1959	2,740	62	367	8	1,317	30	30	1*	4,454
1960	2,884	58	204	4	1,733	35	146	3	4,967
1961	3,427	55	234	4	1,943	33	462	8	6,066
1962	3,550	56	328	5	2,074	33	367	6	6,319
1963	3,365	52	350	5	2,094	33	653	10	6,462

Source: Joint Committee on Guidance and Employment of Youth, Annual Reports; and Hawaii, Department of Education, Research and Statistics Division.

* Less than 0.5 per cent.

In November 1963, the Community College Study Project prepared a special questionnaire which was administered to all high school seniors of the State to ascertain their views on post-secondary education. An analysis of the results of this questionnaire is found in Chapter III of this report. It is of interest to note here, however, that of the more than 9,000 seniors who answered the questionnaire, 6,049 or 65 per cent indicated that they had definite plans to continue their education immediately after graduation, 2,497 or 27 per cent were uncertain about continuing their education, and only 779 or 8 per cent indicated that they "definitely do not plan to go to school next year."

Post-Graduation Activities -- A number of follow-up studies of high school seniors were conducted by the Joint Committee on Guidance and Employment of Youth and by the Department of Education, Research and Statistics Division. These studies of the classes of 1956, 1961, and 1962 reveal that: (a) there tends to be a slightly smaller proportion of students in post-secondary education than that which had educational plans just before high school graduation; (b) there tends to be a smaller proportion employed than that which had employment plans; (c) there tends to be a slightly higher proportion in the military service than that which had military plans; and (d) there is a portion of graduates who are unemployed (see Table 6).

More detailed analyses of the Classes of 1961 and 1962 were conducted by the Department of Education. The post-graduation activities of high school seniors were analyzed in terms of their standing in class, grouped in quintiles. Although standing in class may not be the best single criterion of academic ability, it is nevertheless helpful to analyze post-graduation activities with this factor inasmuch as information on this was available.

Since the HEW report includes a detailed summary of the characteristics of the Class of 1961, this section discusses the educational activities of the three top quintiles in the Class of 1962. The data in Table 7 indicate that females were dominant in the top quintile, although males outnumbered females in the Class of 1962 by slightly more than one hundred. The proportion of males going to four-year colleges, however, exceeded that of females for the three quintiles, with the biggest difference being in the top quintile where 81 per cent of the males and 71 per cent of the females went on to a four-year college. This tendency--for greater proportions of males than females in the three quintiles to continue their education--is also true for the two-year college and the service institution. The reverse is true for nursing schools, business schools, and special schools.

In examining the total proportions of students who went on to school after graduation, it is to be noted that 39 per cent of students in the top two-fifths of their graduating class did not go on to a four-year college; this proportion is similar to that for the Class of 1961. Close to three-fourths, close to one-half and close to one-third of students in the respective quintiles undertook collegiate work. The proportion going to junior colleges had an inverse relationship to standing in class. Next in popularity to four-year colleges which attracted 3,344 students were the special schools (including technical) which

Table 6

POST-GRADUATION PLANS AND ACTUAL ACTIVITIES OF HAWAII'S PUBLIC
AND NON-PUBLIC HIGH SCHOOL GRADUATES IN SELECTED YEARS

Post-Graduation Possibilities	Class of 1956				Class of 1961*				Class of 1962*			
	Plans:		Activity:		Plans:		Activity:		Plans:		Activity:	
	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent
School	3,439	52	3,662	55	5,877	68	5,200	58	5,842	66	5,292	58
Employment	1,789	27	1,265	19	1,741	20	1,606	18	1,749	20	1,384	15
Military Service	1,020	15	1,265	19	486	6	772	8	526	6	848	9
Unemployment**			400	6			776	9			690	8
Other	411	6	67	1	550	6	609	7	727	8	941***	10
Total	6,659	100	6,659	100	8,654*	100	8,963	100	8,844*	100	9,155	100

12

Source: Joint Committee on Guidance and Employment of Youth, Annual Reports; and Hawaii,
Department of Education, Research and Statistics Division.

* The data for 1961 and 1962 graduates are not completely comparable since plans were
available only for those who responded to the questionnaire.

** Includes married girls who are not employed.

*** Includes many who could not be located in the follow-up survey.

Table 7

POST-GRADUATION EDUCATIONAL ACTIVITIES OF HAWAII'S HIGH SCHOOL
GRADUATES ONE YEAR AFTER GRADUATION IN TOP THREE QUINTILES
OF STANDING IN CLASS, EXPRESSED IN PERCENTAGES*
Class of 1962

Post-Graduation Activity	Quintiles of Standing in Class					
	100-81%		80-61%		60-41%	
	N = 660 m 1,244 f		N = 793 m 999 f		N = 963 m 838 f	
	Total	Male	Female	Total	Male	Female
POST-SECONDARY SCHOOLS						
Four-Year College	74.0	80.6	70.6	47.2	53.5	42.2
Two-Year College	1.3	1.4	1.2	3.5	4.4	2.8
Service Institution or Academy	0.6	1.5	0.1	0.2	0.4	
Hospital-Nursing Education	1.9		3.0	1.1	0.1	1.9
Business School	4.7	0.8	6.8	7.9	1.6	12.8
Special School	3.8	3.0	4.2	10.9	9.6	12.0
Post-Graduate in High School				0.1		0.1
TOTAL: EDUCATION	86.3	87.3	85.9	70.9	69.6	71.8
NON-EDUCATION	13.6	12.7	14.1	29.1	30.4	28.1
GRAND TOTAL**	99.9	100.0	100.0	100.0	100.0	99.9
					100.1	100.0
					57.1	54.9
					43.0	45.1
					100.1	100.0
					59.4	40.6
					100.0	100.0

Source: Hawaii, Department of Education, Research and Statistics Division, "Follow-Up
Survey of 1962 High School Graduates" (April 1963), Tables 2 and 4.

* Percentages are based on number in each quintile.

** There are 3,068 students who are in the other quintiles and 590 who have not been ranked.
Some of these students attended post-secondary schools.

attracted 949 students, followed by business schools which attracted 554 students. Greater proportions of the second and third quintiles than of the first went to the latter two institutions.

The proportion of students not continuing their education rises as standing in class gets lower; 14 per cent, 29 per cent, and 43 per cent of the three respective quintiles did not further their education after high school graduation.

There are rather striking differences between the 1,492 private and the 7,663 public high school graduates. Higher proportions of private school graduates went on to some post-secondary educational institution; males tended to continue their schooling and to attend four-year colleges in greater proportion than females in the top two quintiles. The proportion of public school females in the top quintile exceeded their counterparts in the private schools in going to a four-year college as well as in continuing their schooling after graduation. While slightly over 80 per cent of students in the three quintiles in the private schools continued their education after graduation, these proportions were 87, 68, and 52 per cent, respectively, for the public schools. The proportion of students going on to four-year colleges showed a similar relationship between private and public schools. One may conclude that standing in class is more directly related to post-graduation educational plans for public school students than for private school students. It is difficult to explain this simply; probably this is due to basic differences in the academic range of students in both schools and to the influence of certain socioeconomic factors.

Public Technical School Enrollments

Inasmuch as over 90 per cent of the regular students who enroll in Hawaii's public technical schools are high school graduates, the enrollment figures at these institutions reflect a demand for vocational and technical training on the post-secondary level.

Total enrollment in Hawaii's five public technical schools in Fall 1963 was 1,808 as compared to the 1957 enrollment of 1,137; this represents an increase of 59.0 per cent (see Table 8). It should be noted that the Fall 1963 enrollment may be lower than the full-time 1963-64 enrollment, for several sections are offered in certain courses (hotel, restaurant, and food trades; practical nursing) during the academic year. Of all the schools, Kapiolani, Hawaii, and Honolulu Technical Schools experienced the greatest percentage increases in enrollment. Both Kauai and Maui had smaller increases.

The HEW report includes projections of enrollments in Hawaii's public technical schools until 1972-73. These projections, the report indicates, are conservative since they are based on the premise that the technical schools will continue for the next decade as they have in the past to operate in the same manner, to provide similar programs, and to offer the same level of services.² In 1972-73, a projected State enrollment of 2,287 is expected, or an increase of 26.5 per cent over the Fall 1963 enrollment.

Table 8

FULL-TIME STUDENT ENROLLMENTS IN HAWAII'S
PUBLIC TECHNICAL SCHOOLS, BY SCHOOL
1957 to 1962

Technical School	Years						Fall 1963*	Per Cent Increase
	1957	1958	1959	1960	1961	1962		
Honolulu	431	458	482	481	522	561	613	42.2
Kapiolani	192	241	284	330	380	428	512	166.7
Hawaii	166	206	239	204	263	296	309	86.1
Kauai	140	193	165	142	165	147	159	13.6
Maui	208	218	198	200	179	203	215	3.4
STATE	1,137	1,316	1,368	1,357	1,509	1,635	1,808	59.0

Source: Compiled from data supplied by: Hawaii, Department of Education, Division of Vocational, Post-High and Adult Education, Technical Education Branch.

* These enrollments differ slightly from those in Table 9; they were taken during different periods. Furthermore, Fall 1963 enrollments, especially for Kapiolani, are partial since several sections are offered in certain courses during the year.

Course Concentrations -- There are 28 different course concentrations offered in Hawaii's public technical schools, 15 of which can be taken only at one institution (see Table 9). The number of course concentrations varies in each school: in Fall 1963, Honolulu Technical School offered 19; Kapiolani, 8; Hawaii, 11; and Kauai, 6. For the reader's convenience, Table 9 lists the course concentrations in terms of arbitrarily-determined vocational areas. It should be noted that while the total student enrollment over the last four years has remained somewhat constant, there is some variation in the enrollments in vocational areas. Note, for instance, the increase for the academic year in business education from 514 in 1960 to 570 in 1962, in electronics from 75 to 100, and the decrease in aircraft technology from 40 to 17. Among the specific course concentrations which have recently experienced increases in student enrollments from 1960 to 1962 are: cosmetology, electronics, commercial baking, and food service. Among those experiencing decreases are the two courses in aircraft mechanics, hotel maid training and housekeeping, and power machine operation. Some of this decline may be due to the fact that a number of courses (food service, hotel maid training, and power machine operation) are offered under the Manpower Development Training program by the Division of Vocational, Post-High and Adult Education of the Department of Education; these trainees are not included under technical school enrollments.

Table 9

**FULL-TIME STUDENT ENROLLMENTS IN HAWAII'S PUBLIC TECHNICAL
SCHOOLS, BY VOCATIONAL AREA AND COURSE CONCENTRATION*
1960-61 through 1962-63**

Note: A number of courses are offered at only one of the public technical schools. These are designated as follows:

^aHonolulu Technical School

^bKapiolani Technical School

^cHawaii Technical School

Vocational Area and Course Concentration	Years			Fall 1963
	1960-61	1961-62	1962-63	
AIRCRAFT TECHNOLOGY				
Aircraft Mechanics, Air Frame ^a	18	17	9	22
Aircraft Mechanics, Power Plant ^a	22	24	8	22
Sub-Total	40	41	17	44
APPAREL TRADES				
Commercial Sewing	63	68	69	70
Power Machine Operation, Garment ^a	65	23	40	16
Sub-Total	128	91	109	86
AUTOMOTIVE TECHNOLOGY				
Auto Body Repair and Painting	57	62	50	48
Auto Mechanics	159	133	159	146
Diesel Mechanics ^c	21	32	26	32
Sub-Total	237	227	235	226
BUSINESS EDUCATION	514	526	570	668
BUILDING TRADES				
Carpentry, Cabinetmaking	76	66	76	95
Drafting	98	91	98	89
Engineering Aid Training ^a	22	31	26	17
Sub-Total	196	188	200	201
COSMETOLOGY^a	24	36	47	56
ELECTRICITY	53	56	57	58
ELECTRONICS				
Electronics ^a	41	54	66	63
Radio and Television Servicing ^a	34	32	34	30
Sub-Total	75	86	100	93
HOTEL, RESTAURANT AND FOOD TRADES				
Commercial Baking ^a	18	24	34	28
Cafeteria Management ^a	13	15	18	21
Food Service	80	90	106	44**
Hotel Cooking; Culinary Arts, Chef	23	23	24	23
Hotel Maid Training and Housekeeping	42	12	--	--
Pantry Training; Culinary Arts, Pantry ^b	36	34	43	14**
Storeroom Procedures and Food Cost Control ^b	21	16	23	9**
Sub-Total	233	214	248	139
MACHINE SHOP	66	63	69	61
METAL TRADES				
Sheet Metal Trade	52	52	58	50
Welding	109	107	97	82
Sub-Total	161	159	155	132

Table 9 (continued)

Vocational Area and Course Concentration	Years			Fall 1963
	1960-61	1961-62	1962-63	
HEALTH OCCUPATIONS				
Dental Assistance ^b	--	12	20	24
Practical Nursing ^b	123	118	109	66**
Sub-Total	123	130	129	90
REFRIGERATION AND AIR CONDITIONING ^a	23	29	39	38
TOTAL	1,873	1,846	1,975	1,892

Source: Compiled from data supplied by: Hawaii, Department of Education, Division of Vocational, Post-High and Adult Education, Technical Education Branch.

* Based on cumulative June enrollment except for May cumulative enrollment for Hawaii and Kauai Technical Schools, 1960-61. The 1963 enrollment is for September only.

** This is the enrollment in the Fall section only; other sections will register later during the academic year.

Applicants and Enrollees -- Data on the number of students who applied and who enrolled in the various vocational areas were available for Fall 1963 from each of the public technical schools (see Table 10). For the State as a whole, one-half of those students who applied were enrolled in technical schools. However, schools varied considerably; Maui Technical enrolled 91 per cent of those who applied while Kapiolani enrolled only 33.9 per cent, largely due to the fact that it offers a number of courses which have sections scheduled later during the academic year. The remaining three enrolled about three-fifths of those who applied.

The variation was also great in terms of vocational areas. High percentages of applicants were enrolled in machine shop (93 per cent), apparel trades (89 per cent), and metal and welding trades (84 per cent), while low percentages were found in aircraft technology (39 per cent), electronics (46 per cent), and electricity (50 per cent). This may be due to a need for greater selectivity because of employment requirements in these occupations. The very low enrollment rates in the health occupations and hotel, restaurant and food trades are due to partial enrollment figures.

Business education was by far the most popular vocational area with 631 enrolled, followed by automotive technology with 181 students enrolled. Among the areas with few enrollees were refrigeration and air conditioning (38), aircraft technology (44), and electricity (48).

Table 10

NUMBER OF STUDENTS WHO APPLIED AND WHO ENROLLED IN HAWAII'S PUBLIC
TECHNICAL SCHOOLS, BY SCHOOL AND VOCATIONAL AREA
Fall 1963

Vocational Areas														
Technical School	AIRCRAFT TECHNOLOGY	APPAREL TRADES	AUTOMOTIVE TECHNOLOGY	BUILDING TRADES	BUSINESS EDUCATION	COSMETOLOGY	ELECTRICITY	ELECTRONICS	HOTEL, RESTAURANT AND FOOD TRADES	MACHINE SHOP	METAL AND WELDING TRADES	HEALTH OCCUPATIONS	REFRIGERATION AND AIR CONDITIONING	Total
Honolulu														
Applicants	113	21	163	140		103	70	203	59	26	62		52	1,012
Enrollees	44	23	94	86		56	36	93	47	27	64		38	608
Per Cent Enrolled	38.9	*	57.7	61.4		54.4	51.4	45.8	79.7	*	*		73.1	60.1
Kapiolani														
Applicants					726				296			454		1,476
Enrollees					402				57**			42**		501
Per Cent Enrolled					55.4				19.3**			9.3**		33.9
Hawaii														
Applicants		25	44	39	134		27		25	17	21			332
Enrollees		15	29	20	88		12		18	13	8			203
Per Cent Enrolled		60.0	65.9	51.3	65.7		44.4		72.0	76.5	38.1			61.1
Kauai														
Applicants			16	24	83					3	17			143
Enrollees			11	17	54					2	8			92
Per Cent Enrolled			68.8	70.8	65.1					66.7	47.1			64.3
Maul														
Applicants		29	50	44	106					11	24			264
Enrollees		29	47	42	87					11	24			240
Per Cent Enrolled		100.0	94.0	95.5	82.1					100.0	100.0			90.9

Table 10 (continued)

Vocational Areas															
Technical School		AIRCRAFT TECHNOLOGY	APPAREL TRADES	AUTOMOTIVE TECHNOLOGY	BUILDING TRADES	BUSINESS EDUCATION	COSMETOLOGY	ELECTRICITY	ELECTRONICS	HOTEL, RESTAURANT AND FOOD TRADES	MACHINE SHOP	METAL AND WELDING TRADES	HEALTH OCCUPATIONS	REFRIGERATION AND AIR CONDITIONING	Total
State															
Applicants	113	75	273	247	1,049	103	97	203	380	57	124	454	52	3,227	
Enrollees	44	67	181	165	631	56	48	93	122**	53	104	42**	38	1,644	
Per Cent Enrolled	38.9	89.3	66.3	66.8	60.2	54.4	49.5	45.8	32.1**	93.0	83.9	9.3**	73.1	50.9	

Source: Compiled from data supplied by: Hawaii, Department of Education, Division of Vocational, Post-High and Adult Education, Technical Education Branch.

* Percentage unobtainable; more students enrolled than applied.

** This is the enrollment for the Fall section only; other sections will register later during the academic year.

Post-Graduation Activities of Graduates -- Graduates of the public technical schools for 1960, 1961, and 1962 numbered 1,918 and undertook their studies in various vocational areas (see Table 11). During this three-year period, business education was the most popular vocational area--505 students graduated with this major, representing 26.3 per cent of all graduates. Also popular were hotel, restaurant and food trades (312), automotive technology (220), and health occupations (197). Few students graduated in refrigeration and air conditioning (19), cosmetology (35), and aircraft technology (40).

The number of graduates during this three-year period was distributed among the five technical schools as follows: 715 or 37 per cent from Kapiolani, 482 or 25 per cent from Honolulu, and around 12 per cent each from Hawaii, Kauai, and Maui Technical Schools.

The data in Table 12, relating to the immediate post-graduation activities of technical school graduates, indicate that:

1. The proportion of the total State graduates going immediately into employment is about three-fifths; the range is from 21 per cent of Kauai's graduates to 81 per cent of Hawaii's.
2. The proportion of unemployed is around 15 per cent, with Kauai having a high rate of unemployment among its graduates immediately after graduation.
3. Less than 5 per cent of graduates from each of the five public technical schools have continued their schooling.

The Apprentice and Part-Time Evening Programs -- During the period 1960-62 apprentice classes were offered only at Honolulu Technical School, although the Department of Education also provides instruction in isolated trades through a home study program. The enrollments declined from slightly over 2,000 to slightly over 1,500. Apprentice programs were offered in the building trades, electricity, general education, and the metal trades, with building trades attracting more than half of all enrolled.

All five public technical schools offer evening programs for part-time students. Enrollments declined from 2,612 in 1960 to 2,097 in 1962. The State offers a wide variety of classes, but the number available in the technical schools varies; Honolulu offers 22; Kapiolani, 3; Hawaii, 5; Kauai, 6; Maui, 8. More than half of the State enrollment were registered in hotel and restaurant trades, metal trades, and business education. The enrollment in the various schools differed; Honolulu averaged around 700, while Hawaii averaged slightly more than 100. As would be expected, there was also variation in the popularity of the different vocational areas among the five technical schools.

Table 11

NUMBER OF GRADUATES OF HAWAII'S PUBLIC TECHNICAL SCHOOLS,
BY VOCATIONAL AREA AND COURSE CONCENTRATION
Combined 1960-1962

Vocational Area and Course Concentration	Technical School					Total
	Honolulu	Kapiolani	Hawaii	Kauai	Maui	
AIRCRAFT TECHNOLOGY						
Aircraft Mechanics, Air Frame	14					14
Aircraft Mechanics, Power Plant	26					26
Sub-Total	40					40
APPAREL TRADES						
Commercial Sewing	17		12		21	50
Power Machine Operation, Garment	17			26		43
Sub-Total	34		12	26	21	93
AUTOMOTIVE TECHNOLOGY						
Auto Body Repair and Painting	30				37	67
Auto Mechanics	33		28	22	41	124
Diesel Mechanics			29			29
Sub-Total	63		57	22	78	220
BUILDING TRADES						
Carpentry, Cabinetmaking	12		8	9	17	46
Drafting	40		22	15	10	87
Engineering Aid Training	21					21
Sub-Total	73		30	24	27	154
BUSINESS EDUCATION		267	53	118	67	505
COSMETOLOGY	35					35
ELECTRICITY	32		18			50
ELECTRONICS	61					61
HOTEL, RESTAURANT AND FOOD TRADES						
Cafeteria Management	23					23
Commercial Baking	14					14
Hotel Cooking		85	24			109
Hotel Housekeeping		27				27
Pantry Training		69				69
Waiter-Waitress Training		70				70
Sub-Total	37	251	24			312
MACHINE SHOP	16		19	20	21	76
METAL AND WELDING TRADES						
Sheet Metal Trade	34		25		22	81
Welding	38			37		75
Sub-Total	72		25	37	22	156
HEALTH OCCUPATIONS						
Dental Assistance		37				37
Practical Nursing		160				160
Sub-Total		197				197
REFRIGERATION AND AIR CONDITIONING	19					19
TOTAL	482	715	238	247	236	1,918

Source: Compiled from data supplied by: Hawaii, Department of Education, Division of Vocational, Post-High and Adult Education, Technical Education Branch.

Table 12

POST-GRADUATION ACTIVITIES OF HAWAII'S PUBLIC TECHNICAL
SCHOOL GRADUATES, BY SCHOOL
1959-60 through 1961-62

Technical School . and Post-Graduation Activity	Year					
	1959-60		1960-61		1961-62	
	Number	Per Cent*	Number	Per Cent	Number	Per Cent
Honolulu						
Employed**	126	79.2	102	60.0	69	45.1
Continued Schooling	13	8.2	9	5.3	13	8.5
Entered Military	8	5.0	14	8.2	37	24.2
Other	4	2.5	4	2.4	6	3.9
Unemployed			41	24.1	28	18.3
Unknown	8	5.0				
Total	159		170		153	
Kapiolani						
Employed	168	78.1	193	77.8	192	76.2
Continued Schooling	1	0.5				
Entered Military	1	0.5			2	0.8
Other	8	3.7			3	1.2
Unemployed	3	1.4			15	6.0
Unknown	34	15.8	55	22.2	40	15.9
Total	215		248		252	
Hawaii						
Employed	41	50.0	42	51.9	61	81.3
Continued Schooling						
Entered Military	2	2.4	2	2.5	2	2.7
Other					3	4.0
Unemployed	39	47.6	36	44.4	2	2.7
Unknown			1	1.2	7	9.3
Total	82		81		75	
Kauai						
Employed	28	29.2	26	33.8	16	21.6
Continued Schooling	8	8.3	1	1.3	6	8.1
Entered Military					1	1.4
Other						
Unemployed	60	62.5			51	68.9
Unknown			50	64.9		
Total	96		77		74	
Maui						
Employed	37	60.7	39	37.5	40	56.3
Continued Schooling			19	18.3	4	5.6
Entered Military	1	1.6	7	6.7	4	5.6
Other	16	26.2			10	14.1
Unemployed			39	37.5		
Unknown	7	11.5			13	18.3
Total	61		104		71	

Table 12 (continued)

Technical School and Post-Graduation Activity	Year					
	1959-60		1960-61		1961-62	
	Number	Per Cent*	Number	Per Cent	Number	Per Cent
State Total						
Employed	400	65.3	402	59.1	378	60.5
Continued Schooling	22	3.6	29	4.3	23	3.7
Entered Military	12	2.0	23	3.4	46	7.4
Other	28	4.6	4	0.6	22	3.5
Unemployed	102	16.6	116	17.1	96	15.4
Unknown	49	8.0	106	15.6	60	9.6
Total	613		680		625	

Source: Compiled from data supplied by: Hawaii, Department of Education, Division of Vocational, Post-High and Adult Education, Technical Education Branch.

* All percentages are based on number of graduates.

** Includes employed in trained, related and other trades.

College Degree-Credit Enrollments

The growing demand for higher education on the part of greater numbers of high school graduates is partly reflected in the steady increases in college degree-credit enrollments within the State, especially at the University of Hawaii (see Table 13). During the last six years, the total degree-credit enrollment rose from 7,665 to 12,999, or a 69.6 per cent increase. The University of Hawaii experienced a 58.8 per cent growth during this period. Of interest is the increase in first-time enrollments; there was an increase of 129.2 per cent for the State. An examination of the University's enrollment indicates that 21.3 per cent of the total were "first-time" in 1957, but in 1962 this proportion had risen to 28.7 per cent.³

Table 13

DEGREE-CREDIT ENROLLMENTS IN HAWAII'S COLLEGES, BY INSTITUTION 1957 to 1962

Year	Institutions					TOTAL
	Chaminade	Church	Jackson	Maunaolu	University of Hawaii	
1957						
Total	164		214		7,287	7,665
First-Time	67		57		1,555	1,679
1958						
Total	173		320		7,906	8,399
First-Time	42		65		1,901	2,008
1959						
Total	191	520	136		8,798	9,645
First-Time	64	250	35		2,026	2,375
1960						
Total	306	500	180		9,410	10,396
First-Time	110	262	24		2,293	2,689
1961						
Total	372	923		152	10,250	11,697
First-Time	144	453		90	2,561	3,248
1962						
Total	352	891		181	11,575	12,999
First-Time	99	339		92	3,318	3,848
Per Cent Change*						
Total	114.6				58.8	69.6
First-Time	47.8				113.4	129.2

Source: U. S. Office of Education, Opening Fall Enrollment in Higher Education, 1962; Institutional Data (Washington, D. C.: Government Printing Office, 1962), p. 13 and U. S. Office of Education, The University of Hawaii and Higher Education in Hawaii (Report of a Survey), by S. V. Martorana, Ernest V. Hollis, and Staff Members of the Division of Higher Education (Honolulu: Department of Budget and Review, November 1962), p. 48.

* Only for the total and those institutions for which data are available for the last six years.

The great majority of college students in the State are enrolled at the University of Hawaii, almost entirely on the Manoa campus. Several enrollment projections for the University of Hawaii have been made in recent years. The latest are the projections made by the University's Academic Master Plan Committee in Fall 1963. Three tables of particular interest are presented here (see Tables 14, 15, and 16). Among the pertinent observations are the following:

1. Undergraduate enrollment at the University of Hawaii, including the Hilo branch campus, is expected to exceed 16,000 in 1975-76; this represents an enrollment which is more than two and one-half times that of 1960-61.
2. Graduate enrollment is expected to exceed 7,000 in 1975-76, representing an enrollment which is more than five times that of the base year. Although much of this increase is due to the presence of East-West Center grantees, it should be noted that regular students are expected to represent a slightly greater proportion of the total enrollment in 1975-76 (71 per cent) than in 1965-66 (68 per cent).
3. The total enrollment is expected to exceed 23,000 in 1975-76, representing an enrollment which is more than three times that of the base year (1960-61).

Table 14

ACTUAL AND PROJECTED ENROLLMENT OF CLASSIFIED AND
UNCLASSIFIED UNDERGRADUATES, UNIVERSITY OF HAWAII*
1950-51 to 1975-76

Year	Manoa		Hilo	Total	Index
	Regular	E-W Center			
1950-51	4,272	-	86	4,358	67.5
1955-56	4,444	-	228	4,672	72.4
1960-61	6,197	-	260	6,457	100.0
	(Projected)				
1965-66	9,376	113	506	9,995	154.8
1970-71	11,853	223	640	12,716	196.9
1975-76	15,356	230	850	16,436	254.5

Source: University of Hawaii, Academic Master Plan Committee, "Preliminary Draft of the Report of Academic Master Plan Committee of the University of Hawaii," Second Draft (November 1963), p. 29. (Mimeographed.)

* Actual enrollments for the first semester 1963-64 are--Manoa undergraduates, 8,441; Hilo undergraduates, 355; total, 8,796.

Table 15

**ACTUAL AND PROJECTED ENROLLMENT OF CLASSIFIED AND UNCLASSIFIED
GRADUATE STUDENTS, UNIVERSITY OF HAWAII*
1950-51 to 1975-76**

Year	Manoa		Total	Index
	Regular	E-W Center		
1950-51	629	-	629	47.5
1955-56	742	-	742	56.1
1960-61	1,323	-	1,323	100.0
		(Projected)		
1965-66	2,203	1,022	3,225	243.7
1970-71	3,898	2,012	5,910	446.7
1975-76	5,032	2,070	7,102	536.8

Source: University of Hawaii, Academic Master Plan Committee, "Preliminary Draft of the Report of Academic Master Plan Committee of the University of Hawaii," Second Draft (November 1963), p. 30. (Mimeographed.)

* Actual enrollment data for the first semester for 1963-64 give a total of 2,025, inclusive of East-West Center grantees. Fifth-Year and Professional Certificate students are included in this tabulation.

Table 16

ACTUAL AND PROJECTED DAYTIME DEGREE-CREDIT ENROLLMENT, UNIVERSITY OF HAWAII,
INCLUDING ESTIMATED FULL-TIME EQUIVALENT (FTE) STUDENTS
1950-51 to 1975-76

Year	Total Enrollment	FTE	Index
1950-51	4,987	4,266	64.1
1955-56	5,414	4,632	69.6
1960-61	7,780	6,656	100.0
(Projected)			
1965-66	13,220	11,310	169.9
1970-71	18,626	15,934	239.4
1975-76	23,538	20,137	302.6

Source: University of Hawaii, Academic Master Plan Committee, "Preliminary Draft of the Report of Academic Master Plan Committee of the University of Hawaii," Second Draft (November 1963), p. 31. (Mimeographed.)

Despite these recent rapid increases in enrollments at the University of Hawaii, by far the largest collegiate institution in Hawaii, or perhaps because of such large increases in so short a period of time, the HEW report suggests that the University of Hawaii has not been able to meet the demand for higher education within the State. For example, the report notes that despite the fact that increasing percentages of the State's high school graduates desired to continue their education during the period 1952-1961, the percentages of those who chose to go to a university or four-year college "increased steadily from 1952 to 1956, remained even in 1957, and then dropped gradually until in 1961 the proportion was below the 1953 level."⁴ The percentages from 1953 to 1961 respectively were 58, 62, 68, 69, 69, 61, 62, 58, and 55. The report further states: "Evidence was discovered by the survey staff that these changes in senior plans correspond roughly to changes that have occurred in the admissions policies of the University of Hawaii over the past decade." Another contributing factor may be the increasing effectiveness of the counseling programs in the high schools.

Whether Hawaii's public facilities for higher education have kept up with the demands will be discussed at length later in this report. Here it is worthy to note that demand is largely reflected in increases in actual enrollment figures of the past few years, and to recognize that a shortage of facilities may possibly blunt the desire and demand for higher education.

Applicants and Registrants at the University of Hawaii -- Data were gathered on the number of Hawaii's high school seniors who applied for admission at the University of Hawaii immediately after graduation (see Table 17). Using the results of the last four years as a base, the following points seem pertinent:

1. For the State, approximately 40 per cent of Hawaii's high school seniors applied for admission to the University of Hawaii; about three-fourths of the applicants were admitted and about one-half of the applicants actually registered.

2. There is a variation among the districts in the proportion of high school seniors who apply for admission; Honolulu averaged 50 per cent; Leeward and Windward Oahu and Hawaii about 30 per cent; and Kauai and Maui slightly below 30 per cent.

3. The rate of acceptance among the districts was rather similar, ranging from 65 to 75 per cent approximately, except for Kauai which averaged in the high 80's.

4. The proportion of registrants varied considerably among the districts and within the districts themselves over the last four years. Honolulu and Leeward Oahu were fairly stable with approximately one-half of their applicants actually enrolling at the University. Although Windward Oahu, Kauai, and Maui showed great variance in the proportion actually registering, one noteworthy and common feature characterized all three: the rate of registration in Fall 1963 was the highest of the proportions for the last four years. Hawaii's case was just the reverse; it fell from a high rate of registration of 73 per cent in Fall 1962 to 56 per cent in Fall 1963, but this is still above the state average of 54.6 per cent.

Retention and Withdrawal at the University of Hawaii -- Not only the possibilities and actualities of entry into institutions of higher education but also the probabilities of completing the prescribed course of study are of interest in planning the nature of post-high school educational facilities. Retention and withdrawal characteristics of the University of Hawaii were reported in the HEW survey.⁵ The percentages of those who drop out or withdraw during the regular four-year program are indicated below:

	Freshman Class	
	Fall 1957	Fall 1958
Entering freshmen	100.0%	100.0%
Enrolling as sophomores	58.7	51.5
Enrolling as juniors	49.2	43.0
Enrolling as seniors	42.1	38.2
Graduating four years later	26.0	Not Available

Thus, of those who entered as freshmen in 1957, approximately a fourth were graduated in normal four-year progression. An additional 73 students (4.6 per cent) graduated by February 1962 and 144 students (9.2 per cent) were still in attendance in Spring 1962. It should be noted that 176 (11.2 per cent) had transferred to some other institution of higher education.

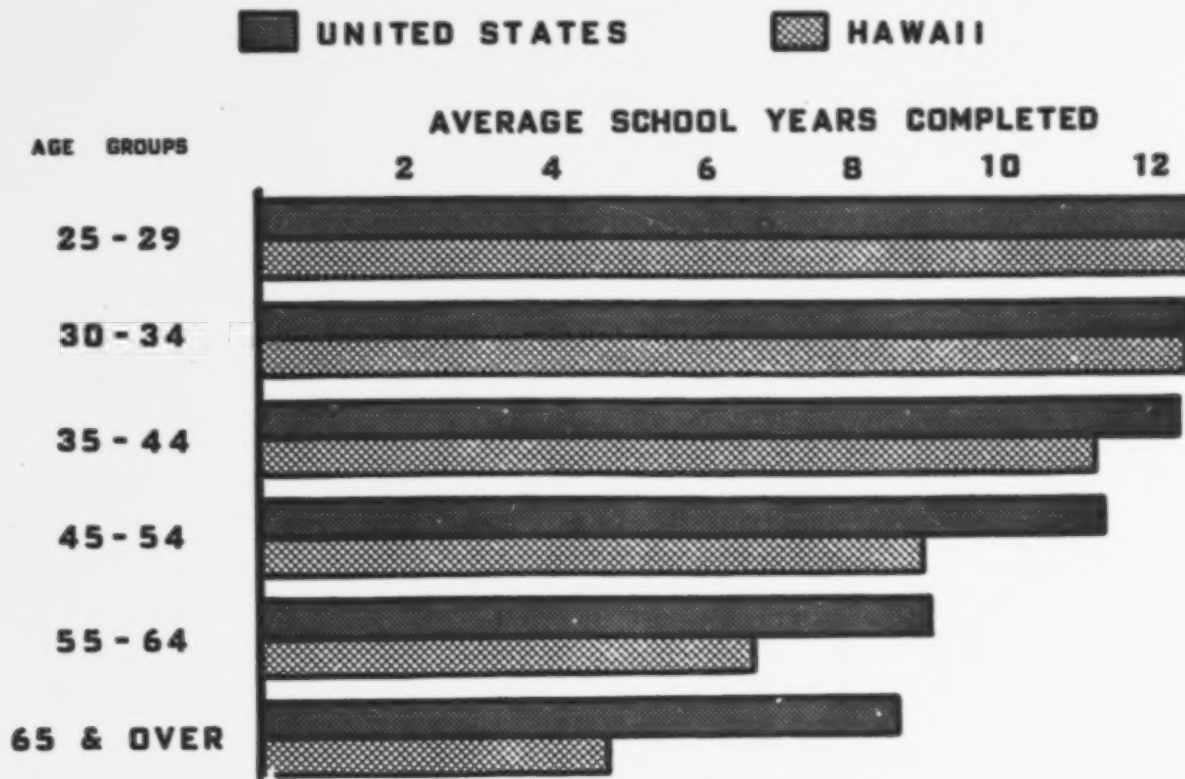
There are many reasons for the low retention rate on college campuses. Attrition is highest at the end of the freshman year and poor academic performance, whatever its causes, plays a role in this high casualty rate. The 1959 University of Hawaii self-study noted: "We do not believe that there will be any argument that something is wrong when nearly three-fifths of the total freshmen class earn less than a 2.0 ["C"] grade point average in the first semester of their freshmen year."⁶

To meet this problem of high attrition especially on the freshman and sophomore levels, the University of Hawaii in its proposed budget for 1964-65 is suggesting a program to provide time for more intensive counseling by the instructional staff. The University's Master Plan Committee endorses this counseling plan. The problem of retention is clearly related to efforts for enlarging the opportunities for higher education.

Public Adult Education Programs

The educational level of Hawaii's adult population has undergone a remarkable change. Half a century ago, the average educational attainment in Hawaii was below that of the mainland average, as indicated in the average number of school years completed by those who are now 65 and over (see Figure 4). According to the 1960 census, the educational level of those under 35 is now equal to that of the comparable group on the mainland. The vital role of educational institutions in Hawaii is evident.

figure 4
EDUCATIONAL LEVELS BY AGE GROUPS



Source: U. S. Census, 1960.

The 1960 U. S. Census also indicates that of Hawaii's population, 25 years and older, 15 per cent have an educational attainment of less than five years of school and close to 54 per cent have not completed high school. These factors, plus the trend toward increasingly higher educational levels, make apparent the need for adult and continuing educational programs.

Two agencies of the State are active in offering adult education courses: the Department of Education and the University of Hawaii through the College of General Studies.

Department of Education -- A recent report of the Department of Education shows that in 1962-63, there were 15,724 adults enrolled in adult general education, and 9,584 in various types of adult vocational education programs. A detailed description of the enrollment in adult general education for 1962-63 is found in Table 18. Of this group, 23.3 per cent or 3,663 were enrolled in lower elementary courses (grades 1-4); 1.6 per cent in upper elementary courses (grades 5-8); and 20.8 per cent in high school academic courses, a total of approximately 45 per cent.

Table 18

STUDENT ENROLLMENT IN THE ADULT GENERAL EDUCATION PROGRAM
OF THE DEPARTMENT OF EDUCATION, BY TYPE OF CLASS
1962-63

Type of Class	Number of Classes	Student Enrollment	
		Number	Per Cent
Citizenship Training	54*	949	6.0
English Language Development (gr. 1-4)	219*	3,663	23.3
Upper Elementary (gr. 5-8)	18**	256	1.6
High School Academic	210**	3,269	20.8
Community Interest	267**	3,304	21.0
	58*	964	6.1
Agency Sponsored	57*	1,876	11.9
Civil Defense	57*	1,443	9.2
TOTAL	940	15,724	99.9

Source: Hawaii, Department of Education, "Adult General and Vocational Education in Hawaii's Public Schools; A Brief Summary of Programs and Services, 1962-63" (n.d.).

* No fee.

** With fee.

In view of the possibility that adults enrolled in credit courses on the secondary level might be interested in furthering their education, data were gathered on (a) such enrollment for the four major islands and (b) the number of high school certificates issued by the Adult Education Community Schools. These reveal that out of 2,901 students enrolled in secondary credit courses in 1962-63, 368 or 13 per cent received high school certificates; slightly more than 90 per cent were students in Honolulu. About 90 per cent of students in secondary credit courses were on Oahu; in addition, 368 were enrolled in high school programs conducted by the military. Both Kauai and Maui in 1962-63 had fewer than 30 students each and Hawaii had 233.

A recent report on Hawaii's public school adult education program makes the following observation: "In general, people seemed ignorant of the breadth of educational services which might be available to them thru public school adult education."⁷ Later the report states:

Local citizens need to know that adult education can be much more than citizenship or basic education. They need to understand that this is an educational program for adults, and that it has little to do with ongoing compulsory educational programs for children and youth. They need to know that adult education is citizenship, basic education, elementary education and high school education. But they also need to know that it is an educational program to meet their needs as adults on a continuing basis. It should include content in English, foreign languages, mathematics, sciences, social sciences, vocational education including business education, industrial education and agriculture, fine arts, homemaking, parent education, civic education including forum and lecture series as well as education in special fields such as leadership training, safety education and education for the aging as well as physical education and crafts.⁸

Under existing levels of financial support, the expansion anticipated in public school adult education enrollment is that due to normal population increases which are projected to be approximately 5 per cent annually. Two factors may change this outlook. First, it has been noted that enrollments in adult education classes rise with the increase in the educational level of the general populace. As the educational level of Hawaii's population continues to rise, the demand for adult education classes can be expected to grow. Second, the elimination or substantial reduction in student fees for academic subjects up to grade 12, a step favored by the Adult Education Division of the Department of Education, is expected to attract greater numbers to adult education classes.

University of Hawaii -- The role of the University's College of General Studies is described as follows by the Academic Master Plan Committee:

The central function of the College of General Studies is to extend the services of the University to people whose educational needs cannot be satisfied within the time schedules and curricula of the degree-granting colleges of the University. A second function is to make available to the people of the State opportunities for continuing education at a collegiate level. A third responsibility of the College is to make the cultural activities of the University

available in population centers throughout the State--for example, through its lyceum series on the neighbor islands.⁹

Six types of instructional offerings and activities are included in the program of the College of General Studies: (a) evening campus credit courses, (b) campus non-credit courses, (c) off-campus credit courses, chiefly at military bases, (d) courses on neighbor islands, now chiefly for teachers, (e) informal activities, and (f) conferences and institutes. These programs serve at least half as many people as are enrolled in the remainder of the University.

Student enrollments in credit and non-credit courses are found in Table 19 for the last four years; unclassified undergraduate students attending during the day are not included in this tabulation. The over-all enrollment, credit and non-credit combined, in 1962-63 was 30.9 per cent larger than that of 1959-60. This represents a total of 6,946 students in credit courses and 3,907 in non-credit courses. An interesting development is the very slight increase in credit enrollment on the Manoa campus (2.8 per cent) and the large increase off campus (78.8 per cent). The large increases in off-campus courses, both credit and non-credit, are due to the establishment of a center at Kwajalein, the availability of appropriated funds to support small classes on the neighbor islands, to a sharp increase in a television-radio course, and to a greater number of participants in conferences sponsored by the College of General Studies.

The credit programs, on and off campus, offer nearly all of the requirements for the first two years of any degree curriculum and an increasing number of upper division (junior and senior levels) courses are being offered in selected fields. In 1962-63, for example, the College offered 308 courses on the Manoa campus, elsewhere throughout the State, and at Kwajalein. Non-credit courses are chiefly introductory courses on the undergraduate level, although some are college preparatory and an increasing number are post-graduate courses for professional people.

Projections for enrollment in the College of General Studies follow:

(a) "Under present policies the number of students [in the credit program] is expected to increase as rapidly and at about the same rate as the day undergraduate student body. This means that enrollment could conceivably be expected to double in about ten years."¹⁰ (b) "No dramatic expansion of [the non-credit] program is anticipated. . . . Further expansion into off-campus non-credit courses will develop as the demand for them becomes apparent. . . ."¹¹

Apparently the need for decentralizing further the offerings of the College of General Studies is being recognized, for in December 1963, the College announced that University courses would be offered in five more off-campus study centers.

Table 19

CREDIT AND NON-CREDIT STUDENT ENROLLMENTS ON AND OFF CAMPUS IN
THE COLLEGE OF GENERAL STUDIES, UNIVERSITY OF HAWAII
1959-60 to 1962-63

Feature	Years				Per Cent Change
	1959-60	1960-61	1961-62	1962-63	
REGULAR PROGRAMS: EVENING					
Campus Credit					
Summer	1,003	920	1,096	1,233	+22.9
Fall	1,168	1,084	965	990	-15.2
Winter	1,018	979	910	1,056	+3.7
Sub-Total	3,189	2,983	2,971	3,279	+2.8
Off-Campus Credit (Accelerated)*					
Summer	327	364	462	677	+107.0
Fall	440	501	688	867	+97.0
Winter	393	569	642	685	+74.3
Spring	436	520	643	624	+43.1
Sub-Total	1,596	1,954	2,435	2,853	+78.8
Non-Credit					
Summer	595	534	611	700	+17.6
Fall	738	730	662	712	-3.5
Winter	590	585	466	527	-10.7
Spring	595	630	567	496	-16.6
Sub-Total	2,518	2,479	2,306	2,435	-3.3
SPECIAL COURSES					
Credit	416	602	687	814	+95.7
Non-Credit	572	393	1,192	1,472	+157.3
Sub-Total	988	995	1,879	2,286	+131.4
TOTAL: CREDIT	5,201	5,539	6,093	6,946	+33.6
TOTAL: NON-CREDIT	3,090	2,872	3,498	3,907	+26.4
GRAND TOTAL	8,291	8,411	9,591	10,853	+30.9

Source: Compiled from data supplied by: University of Hawaii,
College of General Studies.

* The special "accelerated term" runs for a shorter length of time than a semester but has correspondingly longer class periods so that semester credit can be awarded.

Economic Factors

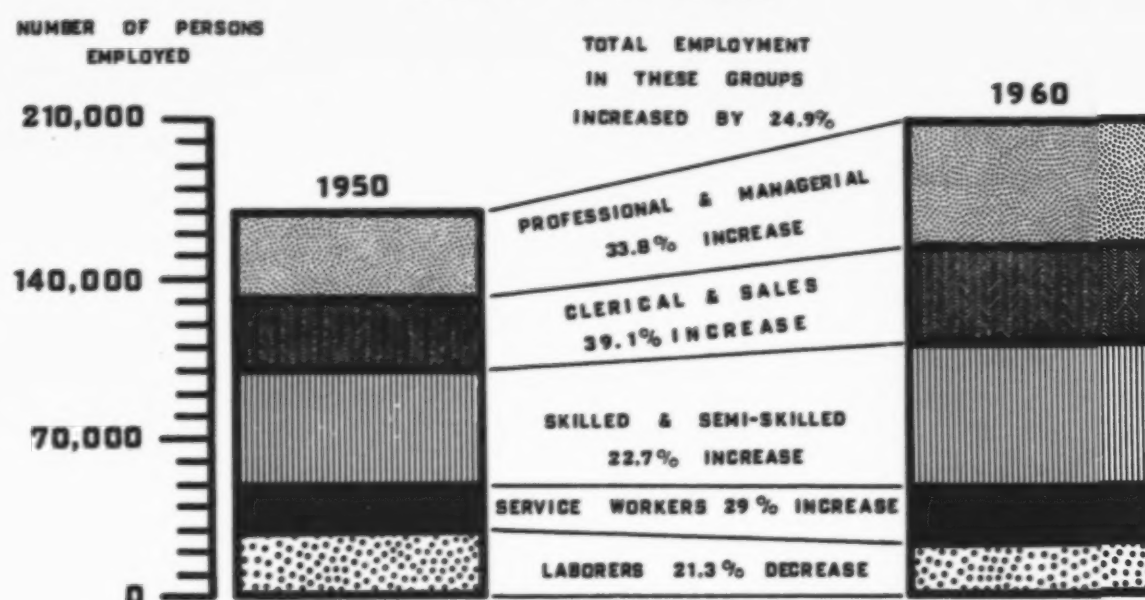
The economy of Hawaii before World War II was dependent upon sugar and pineapple; Hawaii was an agricultural plantation community. After the war, there was a decade of adjustment, sometimes trying and difficult, to a new economy. Since the mid-1950's, Hawaii has shown a steady rate of growth with a more diversified economy. "Instead of being primarily dependent on sugar and pineapples as in the thirties, or on the military as in the first half of the forties, we have today in addition to sugar, pineapple, and the military, a wide range of industrial and agricultural products and a very massive new economic base in tourism."¹²

The Present Economy

The major outlines of Hawaii's present economy, and its recent growth pattern, can be seen in the following listing of employment figures by industry groups (see Table 20). The decline in the number of employees in sugar and pineapple and the rise in other industries, particularly those related to services, can easily be noted.

The changes in the economy of Hawaii are clearly reflected in the shifts in occupational groupings. For the period from 1950 to 1960, the only percentage decline was recorded for laborers in sugar and diversified agriculture; the largest increases were noted in the clerical and professional categories, followed by service workers and skilled and semi-skilled workers (see Figure 5). It is to be noted that the greater mechanization of all industries, including sugar and pineapple, contributes to the changes in occupational groupings.

figure 5
EMPLOYMENT IN HAWAII,
BY OCCUPATION
1950 and 1960



Source: Bank of Hawaii, Department of Business Research, Annual Economic Report (July 1963), p. 15.

Table 20

ESTIMATES OF LABOR FORCE IN HAWAII, BY INDUSTRY GROUP
1953 to 1963

Industry Group	Years						Per Cent Change
	1953	1955	1957	1959	1961	1963**	
Sugar (mill and field)	22,223	20,950	16,815	15,297	13,998	13,490	-39.3
Pineapple (cannery and field)	12,829	12,361	12,048	11,792	11,816	12,950	+ 0.9
Diversified Manufacturing (excluding sugar & pineapple)	8,461	8,898	9,852	11,464	12,353	12,040	+42.3
Diversified Agriculture (excluding sugar & pineapple)	10,033	10,425	10,047	10,298	10,130	9,700	- 3.3
Federal Government	23,237	22,676	25,117	26,069	25,983	27,250	+17.3
State and County Government	16,020	17,055	18,244	19,635	23,263	24,900	+55.4
Construction and Mining*	10,798	9,768	10,321	14,472	17,133	15,200	+40.8
Transportation*	7,177	7,173	8,466	9,828	10,225	10,200	+42.1
Communication*	1,750	1,610	1,714	2,335	2,564	2,700	+54.3
Other Public Utilities*	1,921	1,926	2,018	2,005	2,204	2,350	+22.3
Retail Trade*			24,774	28,402	31,811	32,850	+47.8
Wholesale Trade*	30,633***	32,842***	10,494	10,457	12,262	12,400	
Finance, Insurance and Real Estate*	4,021	4,568	5,305	7,244	10,031	10,950	+172.3
Hotel Services*		2,913	3,406	3,646	4,787	5,250	+85.4
Other Services*	17,985**	16,816	19,036	19,741	24,113	28,100	
Domestic and Self-Employed	19,099	19,447	21,175	22,572	27,994	27,150	+42.1

Table 20 (continued)

Industry Group	Years					Per Cent Change
	1953	1955	1957	1959	1961	1963**
Total Employed	186,436	189,352	199,831	215,257	242,398	243,900
Total Unemployed	9,542	9,924	7,733	6,887	10,159	11,800
Civilian Labor Force	196,142	199,276	207,564	222,144	252,557	259,600
Per Cent Unemployed	4.9	5.0	3.7	3.1	4.0	4.5

Source: First National Bank of Hawaii, Economic Research Department.

* Since the information in reference to the Armed Forces affects the national defense, it could not be revealed.

** Average for January through October.

*** Retail Trade and Wholesale Trade totals combined for 1953 and 1955.

** Hotel Services and Other Services totals combined for 1953.

Note: Figures for 1961 and 1963 were revised in light of 1960 census data and modified reporting procedures.

Future of Hawaii's Economy

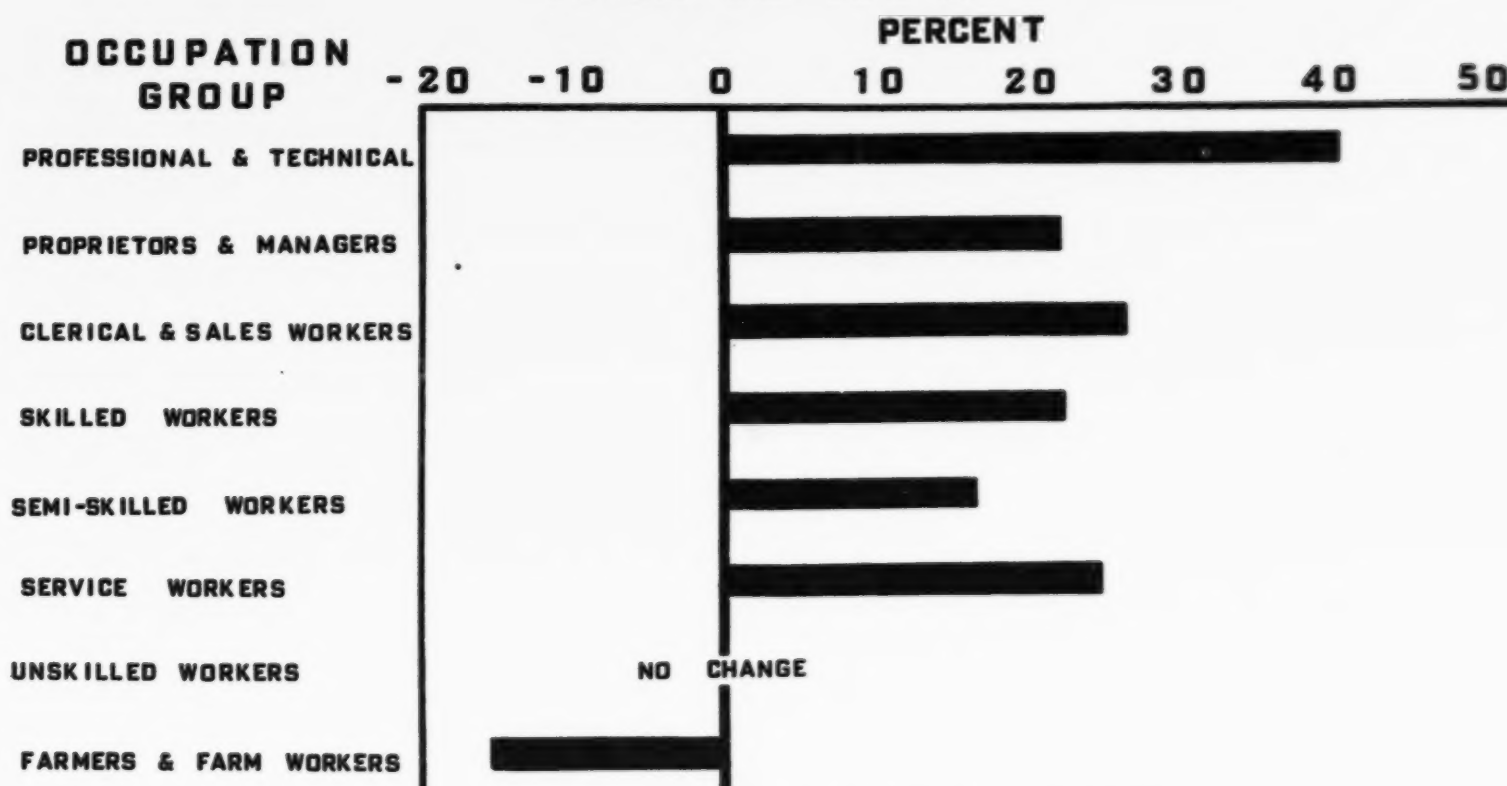
As to the future of the Hawaii economy, a recent study "foresees continued expansion in the scope of activities of the federal government, of the tourist industry, and of a number of 'home' industries, such as finance, construction, retail and wholesale trade and state and local government. On the other hand, not much further expansion is foreseen for the sugar or pineapple industries."¹³

One forecast of manpower needs in Hawaii indicates that the number of workers will rise during 1960-1970 in certain occupations as follows: professional from 20,700 to 30,300 (46 per cent increase); clerical and sales from 43,000 to 65,300 (52 per cent increase); skilled from 32,300 to 42,300 (31 per cent increase); and services from 18,700 to 31,500 (68 per cent increase).¹⁴ These percentage increases are considerably higher than those forecast for the nation during the next decade.

Predictions have been made of changes in the labor force which are expected to occur in the nation between 1960 and 1970 by the U. S. Department of Labor (see Figure 6). The biggest increase will occur in the professional and technical group. The Department notes that the "biggest increases will occur in occupations requiring the most education and training."¹⁵

figure 6

PERCENT CHANGE IN EMPLOYMENT IN THE UNITED STATES, BY OCCUPATION GROUP 1960 to 1970



Source: U. S. Department of Labor, Manpower; Challenge of the 1960s (Washington, D. C.: Government Printing Office, 1960), p. 11.

Implications for Education

The greater specialization necessary in a technological age requires more advanced training. This too is noted in Hawaii.

Technological developments, automation and the increasing complex organizations of business require higher levels of ability. Jobs for unskilled labor are declining, and openings for a widening range of trained specialists are increasing. This in turn is reflected in the rise in the numbers who are taking college and other training before seeking employment in the Territory.¹⁶

A recent report cites education and research as a "third factor" complementing capital equipment and manpower as essential ingredients for economic growth. This third factor is so important that "it may determine the difference between stagnation and rapid business expansion in Hawaii."¹⁷ The report states that the accelerating rate of technological change makes it difficult to visualize the conditions which will obtain by the time those now entering high school have reached maturity. "Yet educational programs must be cast in these terms if today's students are to shoulder tomorrow's responsibilities."¹⁸ The State's consideration of "a system of junior colleges to provide more widespread technical and academic training" is cited as one of the major "break-throughs" by which the State may cope with the educational challenges of the technological age.

Technological changes, especially in the fields of communication and transportation, have also increased Hawaii's contacts with the U. S. mainland as well as the rest of the world. Mention is made of developing Hawaii as a center of services for the Pacific hemisphere; this has cultural, social, and educational as well as economic implications. The increasing mobility of Hawaii's native population as well as the citizenship demands of full participation in national and international affairs emphasizes the desirability of more opportunities for higher education in Hawaii.

Chapter III

HAWAII'S HIGH SCHOOL SENIOR CLASS OF 1964

Efforts in assessing the needs of post-secondary youth have commonly included surveys of these students in terms of their abilities, aspirations, plans and academic interests. Although student responses might be questioned because of their "instability," there seems to be evidence that the responses of high school seniors indicating their post-graduation plans, at any rate, are fairly consistent with what students are doing several years hence. "Previous studies have indicated that plans of high school seniors are predictors of post graduation actions with a validity sufficient to warrant careful attention."¹ A review of the literature indicates that such student surveys are often conducted by communities which are exploring the possibility of establishing community colleges.

As indicated earlier, the Joint Committee on Guidance and Employment of Youth has annually studied the post-graduation plans of Hawaii's high school seniors since 1952, and a number of follow-up studies were also conducted in selected years. Data in Chapter II reveal that the post-graduation plans of Hawaii's high school seniors and their actual post-graduation activities are closely related.

Background of the Questionnaire

For both these reasons--the desirability of student reactions as part of a feasibility study and the relative stability of high school senior responses--a questionnaire, "High School Senior Survey" (Appendix A), was developed. The questionnaire had two important purposes: (a) to assess post-graduation plans of students and their reactions to the possibility of establishing community colleges in Hawaii and (b) to stimulate student thinking about the nature of new educational institutions which might more effectively provide for technological demands and youthful aspirations.

Prior to the administration of the questionnaire, the items were reviewed by the staff members of the Community College Study Project, and a pre-test was conducted in three classes--low, average, and high in terms of "academic ability"--at one of the public high schools. In the light of these two reviews, the questionnaire was put in final printed form.

The questionnaire is composed of three parts:

1. Section A: includes questions on the academic and socioeconomic background of students.
2. Sections B, C, and D: include questions relating to the post-graduation plans of three distinct groups of seniors: (Section B) those who plan to go to some post-secondary educational institution, (Section C) those who are uncertain about continuing their education, and (Section D) those who plan not to continue their education.

3. Section E: includes questions on student reactions to the possible establishment of public two-year colleges.

Questionnaires were sent to each of the 49 public and private high schools in the State, and their cooperation was sought in making their own arrangements for the administration of the questionnaires during the last two weeks in November 1963.

The data in Table 21, relating to the distribution of seniors in public and private institutions, by districts, indicate that slightly more than four-fifths of all Hawaii's seniors are in the public schools and that three-fourths of all seniors, public and private together, are attending schools on Oahu. Of the 10,390 seniors, 9,665 or 93 per cent were present when the questionnaire was administered; 9,448 responses (98 per cent) were judged to be usable. All schools were close to the 93 per cent rate of return; the range was 82 per cent to 100 per cent of their respective senior classes; 38 schools had over a 90 per cent return. It should be noted, however, that the total numbers of responses are not identical for all items since some seniors may have failed to answer all the items or may have misunderstood directions for particular items. Responses were coded and punched on IBM cards. The facilities of the Statistical and Computing Center, University of Hawaii, were used to tabulate the results.

Much information on the Senior Class of 1964 was gained from the "High School Senior Survey." This chapter will concentrate on those aspects which have pertinence to this community college feasibility study.

Table 21

HAWAII'S HIGH SCHOOL SENIORS IN PUBLIC AND NON-PUBLIC
HIGH SCHOOLS, BY DISTRICT*
November 1963

District	Number of Seniors			Percentage of State Total
	Public	Private	Total	
OAHU	6,227	1,654	7,881	75.8
Honolulu	(3,469)	(1,628)	(5,097)	(49.0)
Leeward	(1,778)	-	(1,778)	(17.1)
Windward	(980)	(26)	(1,006)	(9.7)
HAWAII	1,110	102	1,212	11.7
KAUAI	484	-	484	4.7
MAUI	<u>702</u>	<u>111</u>	<u>813</u>	<u>7.8</u>
TOTAL	8,523	1,867	10,390	100.0

* Each district included the following high schools:

Honolulu: 19 schools

Public (5): Farrington, Kaimuki, Kalani, McKinley, Roosevelt.

Private (14): Hawaiian Baptist, Hawaiian Mission, Iolani, Kamehameha Boys, Kamehameha Girls, Maryknoll, Mid-Pacific, Punahou, Sacred Hearts Academy, St. Andrews Priory, St. Francis Convent, St. Louis, Star of the Sea, and the University Laboratory School (quasi-public).

Leeward Oahu: 6 schools

Public (6): Aiea, Leilehua, Radford, Waialua, Waianae, Waipahu.

Windward Oahu: 4 schools

Public (3): Castle, Kahuku, Kailua.

Private (1): St. Ann's.

Hawaii: 9 schools

Public (7): Hilo, Honokaa, Kau, Kohala, Konawaena, Laupahoehoe, Pahoa.

Private (2): Hawaii Preparatory Academy, St. Joseph's.

Kauai: 3 schools

Public (3): Kapaa, Kauai, Waimea.

Maui: 8 schools

Public (6): Baldwin, Hana, Lahainaluna, Lanai, Maui, Molokai.

Private (2): St. Anthony's Boys, St. Anthony's Girls.

Pertinent Findings

Item 23 of the questionnaire elicits student reactions to the possibility of their attending a public two-year college and has the most direct bearing of any of the items on the basic problem of the study:

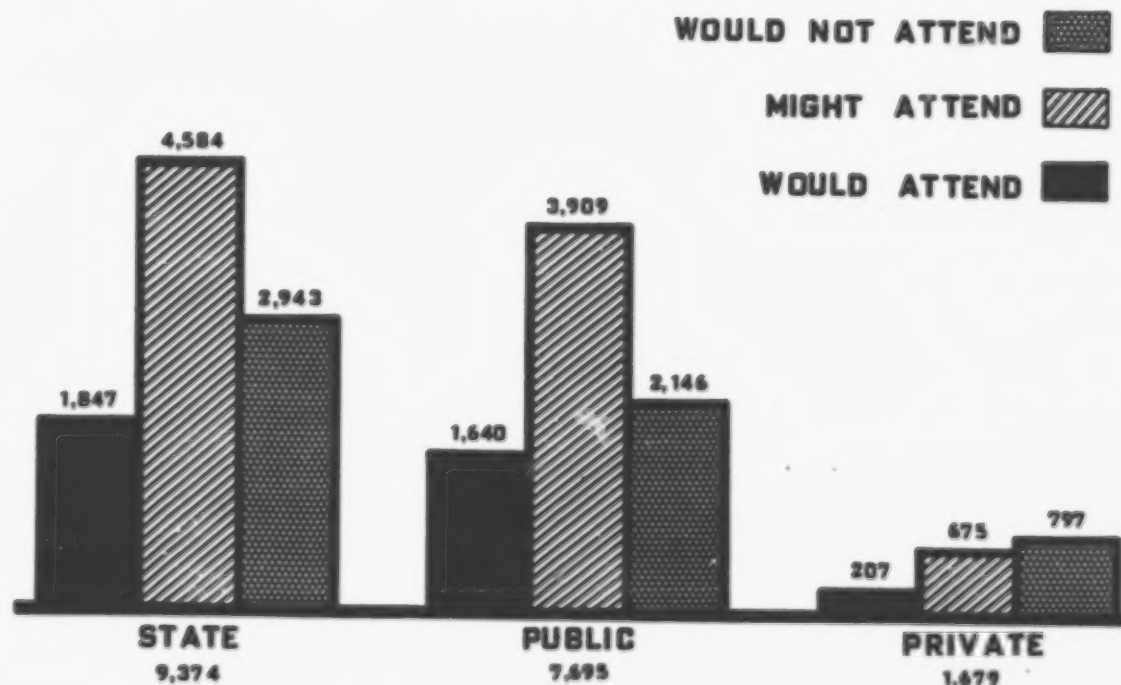
23. If, in your district, there were a public two-year college to which you may be admitted, offering freshman and sophomore college courses, technical-vocational courses, and general education courses, how might this affect your plans? (check one)

- (1) I would enroll in that institution.
- (2) I might enroll in that institution.
- (3) I would still not change my original school plans.
- (4) I would not attend that institution.

On the basis of their responses to this question, seniors are divided into three groups: (a) those who would enroll, (b) those who might enroll, and (c) those who would not enroll--a combination of students who checked either the third or fourth choice on question 23.

Sixty-nine per cent of Hawaii's high school seniors indicated either that they would enroll in a public two-year college, or that they might enroll and about 31 per cent said definitely that they would not enroll (see Figure 7). There are rather striking differences between students in the public and private schools; in the private schools smaller proportions of students indicated they would or might enroll while close to one-half said they would not.

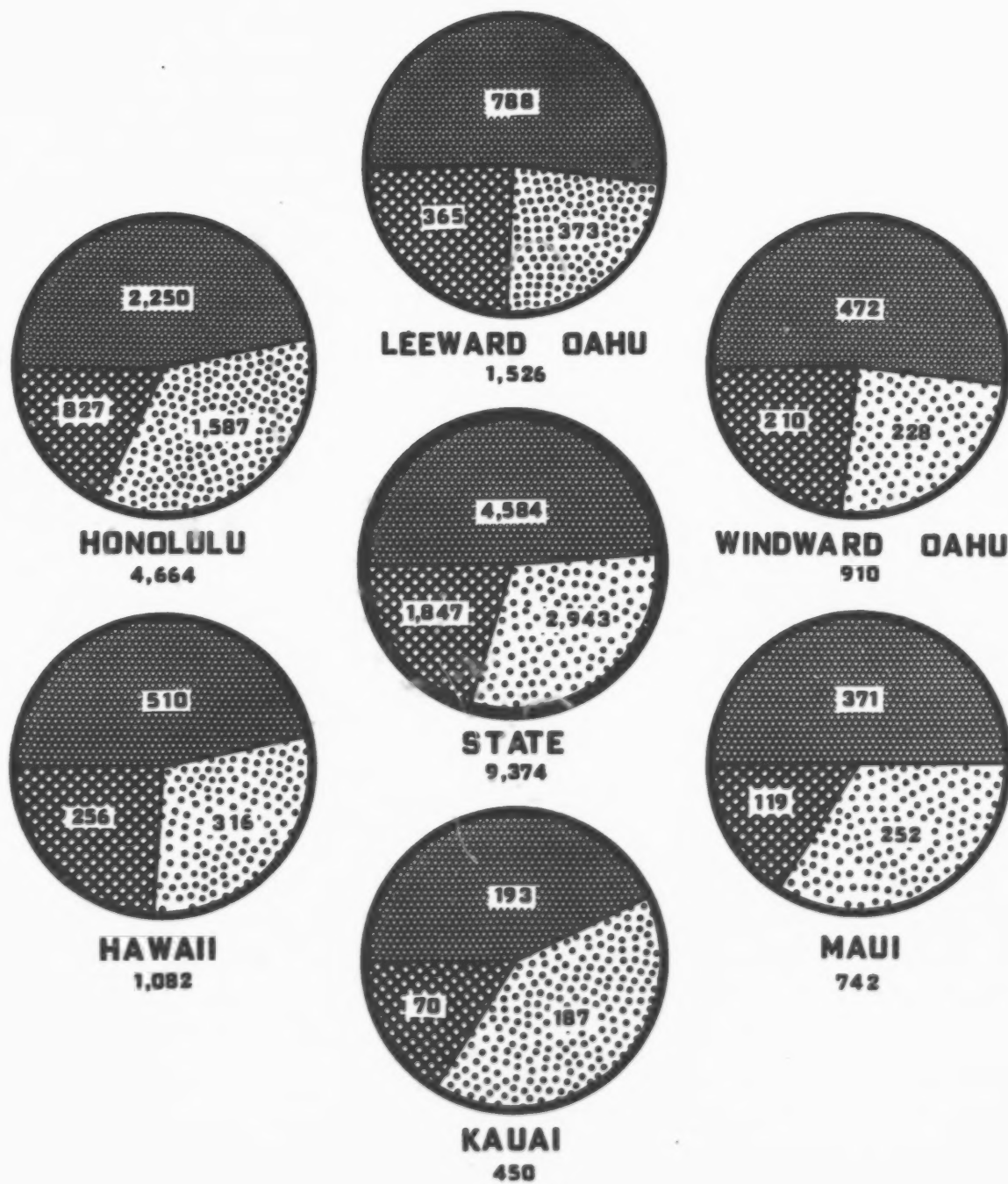
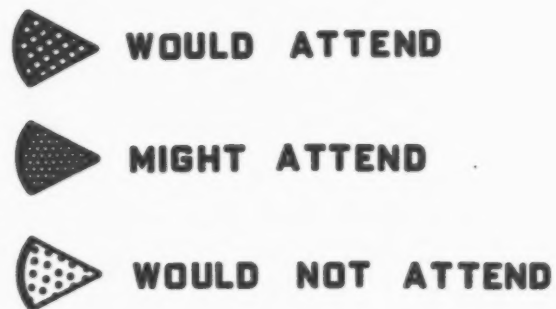
figure 7
COMMUNITY COLLEGE ATTITUDES
BY TYPE OF SCHOOL



Student responses, by districts, are presented in Figure 8. While there are minor differences among the several districts, it is possible to say that from three-fifths to three-fourths of all seniors in each of the districts would consider attending a public community college and about one-third said that they definitely would not. The greatest proportion (42 per cent) of negative reactions to the public two-year college was found on Kauai. The most favorable attitudes (over 70 per cent indicating "would" or "might" enroll) were found in Leeward and Windward Oahu and the County of Hawaii.

The remaining findings are presented in terms of the three basic parts of the questionnaire: background of students, their post-graduation plans, and their reactions to a public two-year college. Differences either between private and public schools or among geographical districts are not discussed since the focus is on the three sub-populations of the Class of 1964, based on attitudes on possible attendance at a public two-year college--would, might, or would not enroll. In addition to data on the three sub-populations, information is presented on the total state distribution of responses so that it can be compared with the distribution of responses in each of the sub-populations. One would expect the distributions of students, on a particular item, in the sub-populations to be similar to the State's. If there are differences they are mentioned. Consequently, the terms, "greater proportions" or "smaller proportions," when used to describe the composition of the sub-populations, refer to the total state distribution. For example, the "would" group had a distribution as follows of students, based on sex: 53 per cent males and 47 per cent females. One notes, however, that the state distribution was 49 per cent males and 51 per cent females. This slight discrepancy is described thus: Males comprised a slightly greater proportion than expected in the "would" group. Furthermore, differences among the three sub-populations are discussed.

figure 8
COMMUNITY COLLEGE ATTITUDES
BY DISTRICT

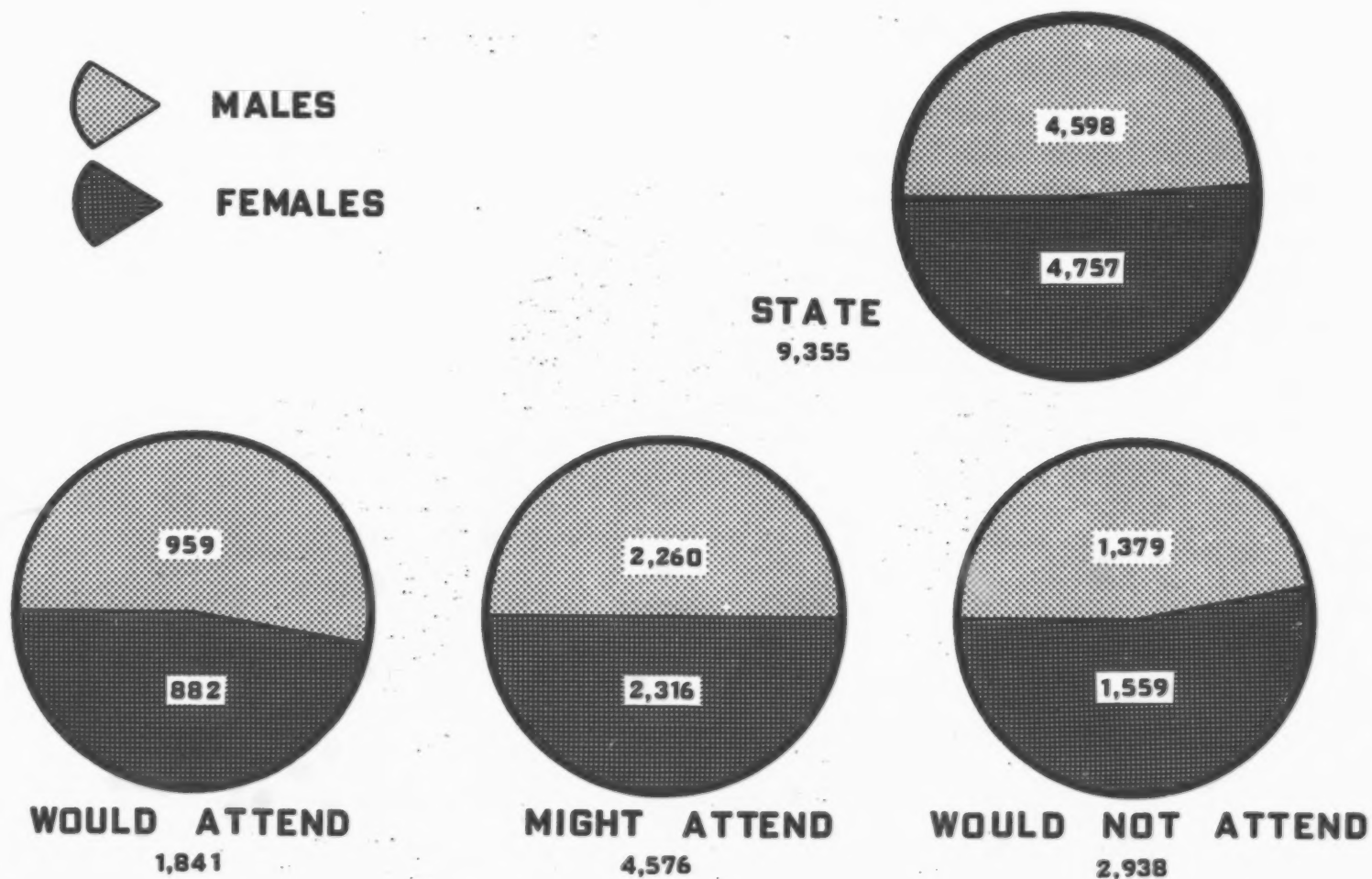


Academic and Socioeconomic Background

Of those who responded to the questionnaire, slightly more than half (51 per cent) were females. Figure 9 indicates that males comprised a slightly greater proportion than expected in the "would" and females in the "would not" group.

figure 9

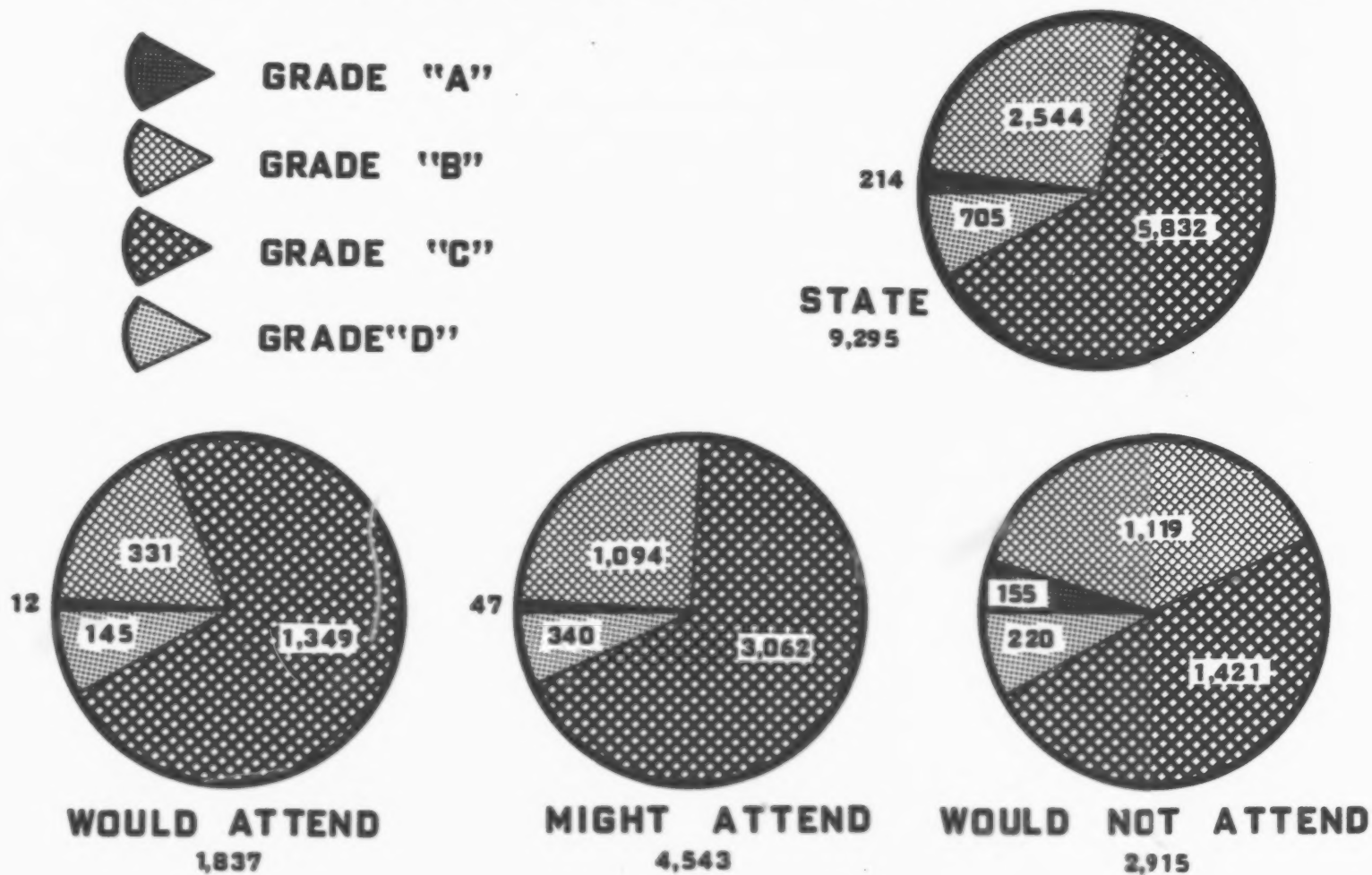
COMMUNITY COLLEGE ATTITUDES BY SEX



Among the items furnishing data on the academic background of students are those relating to their average high school grades, their high school course concentrations, and their consideration of college education after high school. Findings on the socioeconomic background relate to parents' occupations, parents' educational levels, parental attitude toward post-graduation education, family's source of support, and number of dependents in family.

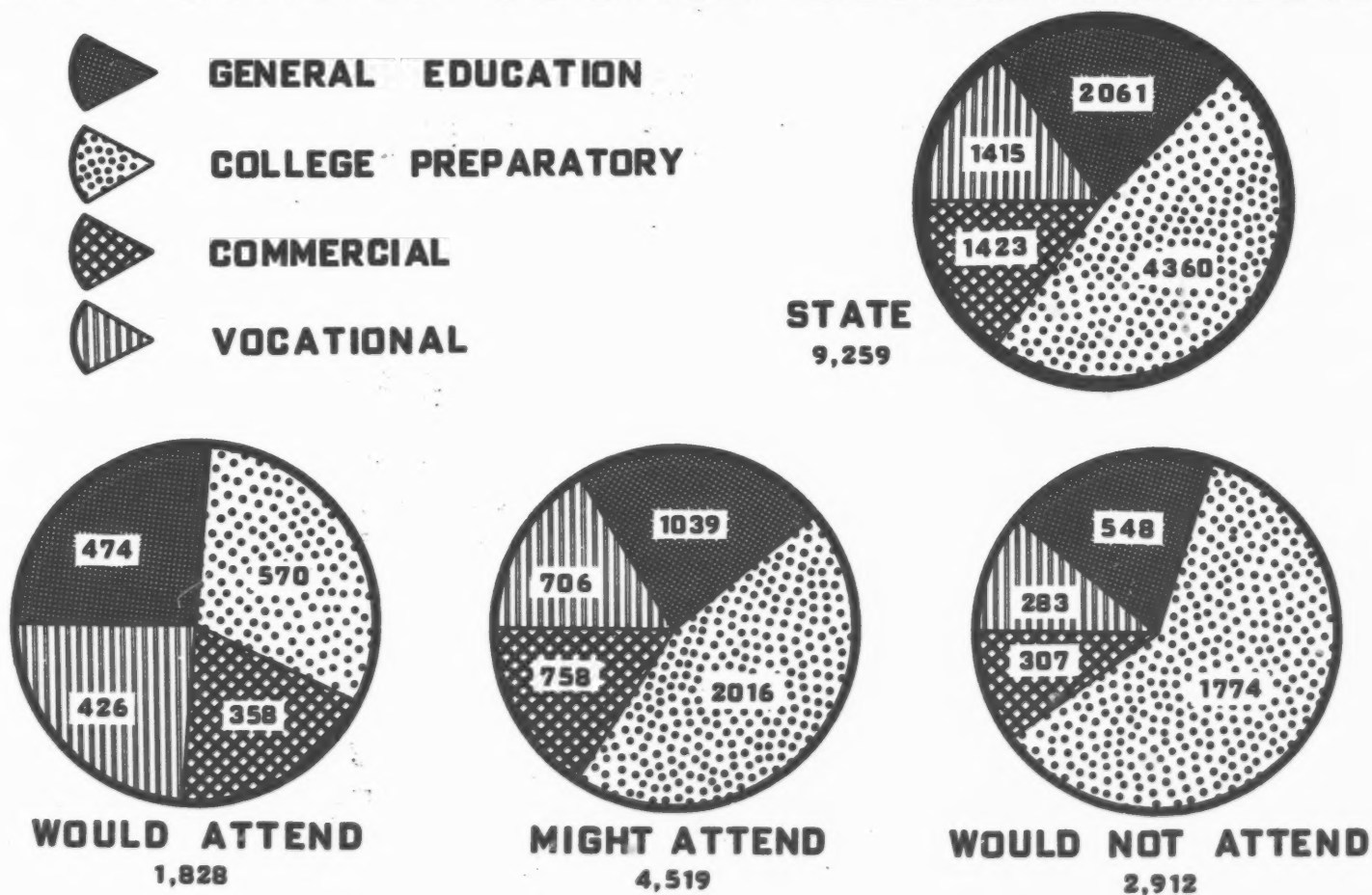
Academic Factors -- Close to two-thirds of Hawaii's high school seniors rated themselves as "C" students, while about one-fourth were "B", less than one-tenth were "D", and two per cent were "A". In examining Figure 10, one notes that there tended to be, among those who said they would enroll in a public two-year college, more "C" students than one would expect, but fewer "B" students and hardly any "A" students. This was also true of those who said they might enroll, although the differences in proportions were smaller. The reverse is true of students who said they would not attend--"A" and "B" students comprised 43 per cent of this group, although they represented only 29 per cent of the state total. This is not entirely surprising, for the majority of "A" and "B" students probably expect to attend four-year colleges. A further examination of the data reveals that while 72 per cent of "A" and 44 per cent of "B" students would not enroll, 56 per cent of "B", 76 per cent of "C" and 69 per cent of "D" students said they would or might attend a public two-year college. The fact that between one-half and three-fourths of "B", "C", and "D" students would consider attendance is noteworthy.

figure 10
COMMUNITY COLLEGE ATTITUDES
BY AVERAGE HIGH SCHOOL GRADES



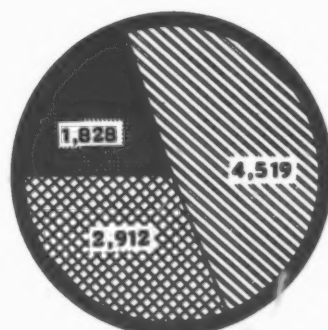
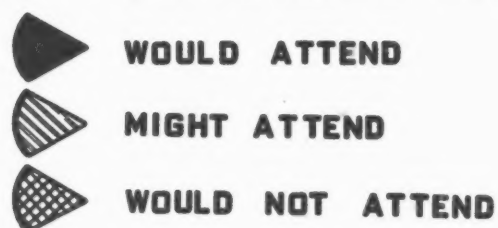
Seniors indicated their course concentrations as follows: 47 per cent were "college prep," 15 per cent were commercial, 15 per cent were vocational-trade-technical, and 22 per cent were general education (see Figure 11). Of the "would" sub-population, there was a greater proportion of "vocational" students and a smaller proportion of "college prep" students than in the state total. Commercial and general education students appeared in proportions similar to those in the total. The "might" sub-population was distributed among the four course concentrations as was the state total. However, the "would not" group included far more "college prep" students than expected and fewer of those in the remaining course concentrations.

figure 11
COMMUNITY COLLEGE ATTITUDES BY
HIGH SCHOOL COURSE CONCENTRATIONS

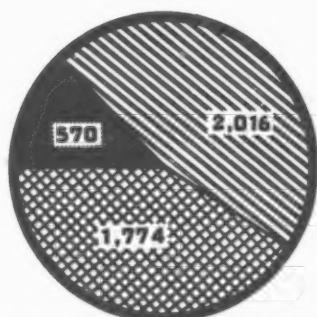


An interesting and significant finding relates to the manner in which seniors in each of these categories responded (see Figure 12). Between 60 per cent and 90 per cent of students in each of the course concentrations expressed a favorable attitude toward community college attendance. The least favorable was the "college prep" group; 40 per cent indicated they would not attend and 60 per cent said they would or might enroll.

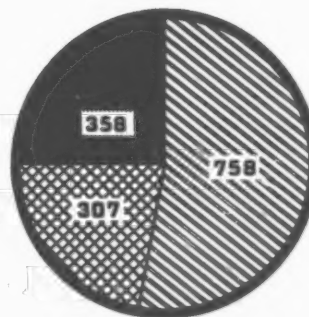
figure 12
COURSE CONCENTRATIONS BY
COMMUNITY COLLEGE ATTITUDE



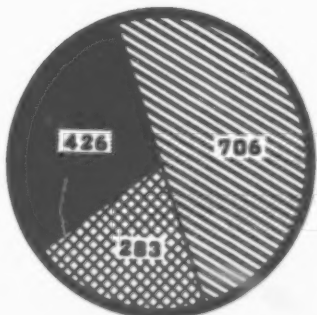
STATE
9,259



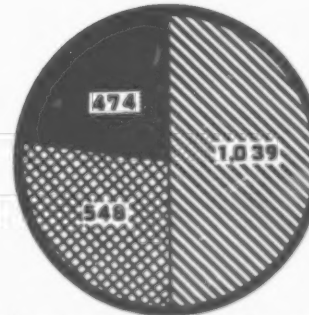
COLLEGE PREPARATORY
4,360



COMMERCIAL
1,423



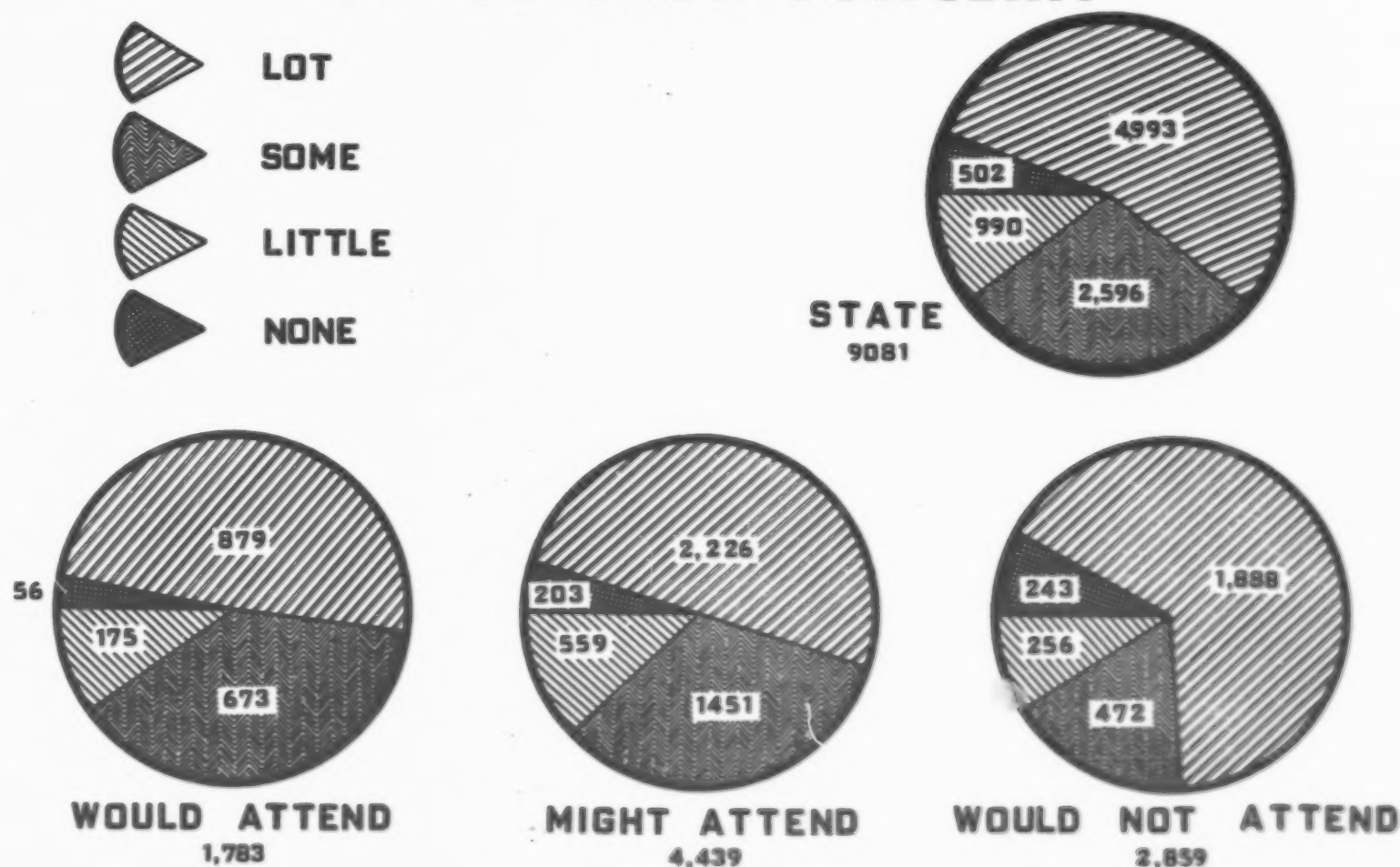
VOCATIONAL
1,415



GENERAL EDUCATION
2,061

Slightly more than half (55 per cent) of seniors indicated they had devoted "quite a lot" of thinking about a college education, about three-tenths had devoted "some" thinking, about one-tenth had done "a little" thinking, and 6 per cent had done "no" thinking (see Figure 13). Of those who said they would enroll, there was a slightly greater proportion of those who had done "some" thinking, but smaller proportions of those who had either done a "lot" or "no" thinking. This is also true of the "might" sub-population. The "would not" group included a greater proportion of those who had done a "lot" of thinking and a smaller percentage of those who had done "some" thinking. A study of community college attitudes within each group, based on degree of thought devoted to a college education, shows that the most favorable were students who had given some thought (82 per cent indicated would or might enroll) and the least favorable were those who had given no thought (51 per cent indicated would or might enroll) to the possibilities of a college education.

figure 13
COMMUNITY COLLEGE ATTITUDES
BY COLLEGE CONCERN



Socioeconomic Factors -- Seniors were asked to indicate the occupations of their fathers and mothers in terms of broad categories defined in accordance with the Dictionary of Occupational Titles, a publication of the U. S. Department of Labor. The results of student responses are summarized in Table 22. The most popular occupations among fathers were skilled (23 per cent) and managerial work (16 per cent) and among mothers' occupations were household responsibilities (49 per cent) and clerical work (14 per cent). In the "would" group were smaller proportions of students whose fathers or mothers were professional persons; these students tended to indicate they would not attend a public two-year college. The children of fathers who were skilled or semi-skilled workers were favorably inclined--three-fourths of them said they would or might enroll. In the remaining parental occupational groupings, with the exception of the professional, approximately two-thirds of the students were willing to consider enrollment.

Table 22

PARENTAL OCCUPATIONS OF HAWAII'S HIGH SCHOOL SENIORS,
CLASS OF 1964, BY OCCUPATIONAL GROUPING

Occupational Grouping	Father		Mother	
	Number	Per Cent	Number	Per Cent
Professional	744	8	350	4
Semi-Professional	285	3	268	3
Managerial	1,480	16	373	4
Clerical or Sales	810	9	1,263	14
Personal Services	132	2	933	11
Protective	965	11	24	*
Agriculture, fishing, forestry	345	4	60	1
Skilled	2,085	23	329	4
Semi-skilled	892	10	195	2
Unskilled	742	8	483	5
Housewife	--	--	4,339	49
Other	169	2	77	1
Don't Know	334	4	173	2
Total	8,983	100	8,867	100

Source: Responses to 1963 Hawaii "High School Senior Survey".

* Less than 0.5 per cent.

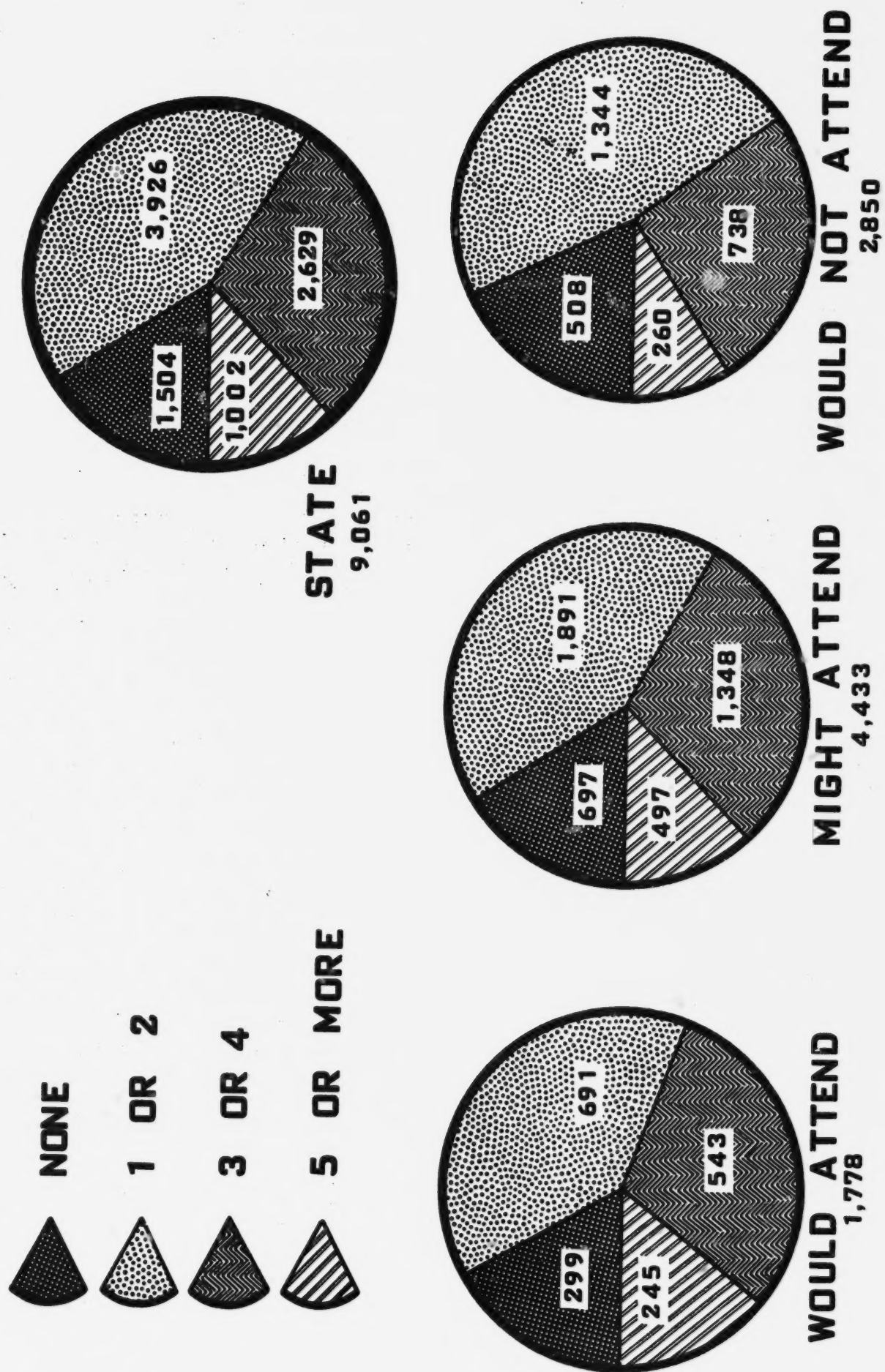
Of the parents of high school seniors, 23 per cent of fathers and 26 per cent of mothers had 8 or fewer years of schooling; 41 per cent of fathers and 46 per cent of mothers had 9 to 12 years; 5 and 3 per cent, respectively, were technical school graduates; 6 and 5 per cent, respectively, had some college work while 8 and 5 per cent were college graduates; 4 and 2 per cent, respectively, went to graduate or professional school; and 15 and 12 per cent, respectively, had educational levels which were not known. An examination of student responses shows that there was a tendency for students with parents who had continued their education beyond high school to cluster in the "would not" sub-population and students with parents of less than high school education to be in the "would" and "might" groups.

Students expressed their perception of their parents' attitudes toward post-secondary education as follows: 73 per cent of parents either insisted or wanted their children to continue schooling; 23 per cent left the decision entirely up to their children; less than one per cent was not in favor of further education; and 3 per cent did not know their parents' attitudes. The three sub-populations, in terms of possible attendance at a public two-year college, were distributed in a manner similar to that of the state total.

The families of Hawaii's seniors were supported in various ways. About two-fifths were supported by the father only, another two-fifths by both father and mother, and the remaining one-fifth by other combinations of parents, siblings, relatives, and government assistance. Four per cent of seniors were supported by mother alone. The data show that the distribution of students in the three sub-populations, in terms of source of support, is similar to that of the state total.

An examination of data on the family size of seniors reveals that 43 per cent of students came from families with one or two dependents, 29 per cent with three or four dependents, 16 per cent with no dependents, and 11 per cent with five or more. Although the three sub-populations are basically similar to the state in the distribution of students in terms of family size, there is a slight tendency for more students from families with one or two dependents to indicate they would not enroll (see Figure 14).

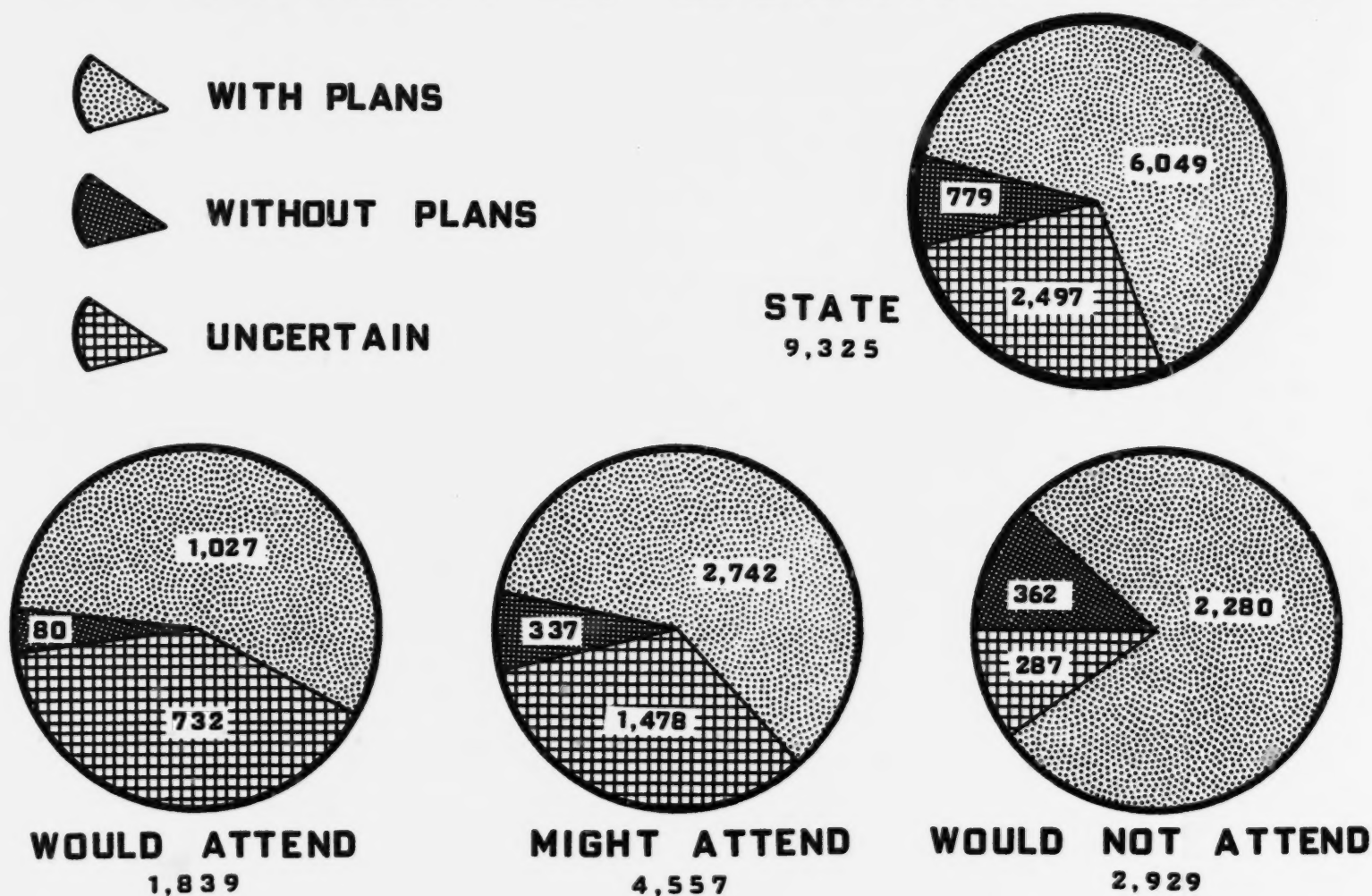
figure 14
COMMUNITY COLLEGE ATTITUDES
BY NUMBER OF FAMILY DEPENDENTS



Post-Graduation Plans

Close to two-thirds of Hawaii's high school seniors had definite plans about continuing their education (see Figure 15). This proportion is similar to that of recent graduating classes. Twenty-seven per cent are uncertain about educational plans, and 8 per cent have no plans for education. The "would" group has slightly less than expected of the students with definite plans and more of those who are uncertain. The "might" sub-group is similar to the total. The "would not" includes more of those with definite plans as well as those with no plans to continue their education. To put it another way, a favorable attitude toward possible enrollment at a public two-year college was held by 88 per cent of the "uncertain" group, 62 per cent of the group with definite plans for further schooling, and 54 per cent of the group with no immediate plans to continue their education.

figure 15
COMMUNITY COLLEGE ATTITUDES
BY CERTAINTY OF EDUCATIONAL PLANS



The questionnaire had three different sets of questions for students depending on their post-graduation plans, and the following section presents data in these terms.

Definite Educational Plans -- Seniors with definite educational plans indicated the educational institution they hoped to attend by name and location. Among the pertinent observations which may be drawn from Table 23 are the following:

1. Two-thirds of these students (3,993) plan to attend a four-year college or university. Of this number, 2,428 plan to attend an institution in Hawaii; this represents 40 per cent of the students with educational plans.

Table 23

COMMUNITY COLLEGE ATTITUDES OF HAWAII'S HIGH SCHOOL SENIORS WHO
INTEND TO CONTINUE THEIR EDUCATION, CLASS OF 1964,
BY TYPE AND LOCATION OF SCHOOL

Type and Location of School	Community College Attitudes							
	Would		Might		Would Not		Total	
	Number	Per Cent	Number	Per Cent	Number	Per Cent	Number	Per Cent
Four-Year College								
Hawaii	372	36	1,293	47	763	33	2,428	40
Mainland	71	7	515	19	979	43	1,565	26
Junior College								
Hawaii	45	4	60	2	26	1	131	2
Mainland	77	7	157	6	129	6	363	6
Business School								
Hawaii	158	15	290	11	127	6	575	9
Mainland	10	1	11	*	15	1	36	1
Technical School								
Hawaii	254	25	300	11	141	6	695	11
Mainland	7	1	19	1	15	1	41	1
Other	40	4	106	4	87	4	233	4
TOTAL	1,034	100	2,751	101	2,282	101	6,067	100

Source: Responses to 1963 Hawaii "High School Senior Survey".

* Less than 0.5 per cent.

2. In order of popularity after the four-year colleges are the following educational institutions: trade or technical schools will be attended by 12 per cent of seniors; business schools by 10 per cent; junior colleges by 8 per cent; and other schools by 4 per cent. The great majority of students selecting business or technical schools planned to remain in Hawaii, while those who chose the junior college tended to go to the mainland.
3. The "would" group had a smaller proportion of students who chose a four-year institution, but greater proportions of those who chose junior college, business school, and technical school. Further analysis indicates that whereas only 5 per cent of the mainland college bound and 15 per cent of those who plan to attend a four-year college in Hawaii "would" enroll at a two-year college in Hawaii, 34, 27, and 37 per cent, respectively, of those who now plan to go to a junior college, business school, or a technical school in Hawaii "would" enroll at a two-year institution.
4. The "might" sub-population was similar to the state total.
5. There tends to be more students who chose the four-year institution in the "would not" category.

Noteworthy is the fact that those who selected institutions in Hawaii tended to be more favorably inclined toward a public two-year college than students who chose to go to the mainland. Seventy-one per cent of those who selected institutions in Hawaii "would" or "might" enroll at a two-year college against 43 per cent of those who chose mainland institutions. The farther away from Hawaii the selected four-year institution is located the more probable that a "would not" reply would be indicated by the student. For example, 85 per cent of those who plan to attend colleges in New England indicated that they would not attend a local two-year college whereas 56 per cent of those who plan to enroll at colleges on the West Coast so indicated.

In examining the fields of study selected by seniors with definite educational plans, 77 per cent chose college programs, 16 per cent chose commercial or business programs, 6 per cent chose technical programs, and 1 per cent remained unsure. The "would" group had slightly greater proportions of students who chose commercial and technical programs, but a smaller proportion of those who chose college programs. The reverse is true of the "would not" sub-population. The "might" group was similar to the state total.

Information was also gathered on the degree of parental support students expected to receive. Of the 5,418 students who responded, 17 per cent expected all of their educational expenses to be borne by their parents, while 5 per cent expected no help from their parents. The expected degree of aid was as follows: none by 249 students, 1-25 per cent by 689 students, 26-50 per cent by 1,495 students, 51-75 per cent by 1,107, 76-99 per cent by 966, and 100 per cent by 912 students. Although the three sub-populations were similar to the total, the "would" group had slightly more students who anticipated receiving 50 per cent or less of their expenses from parents.

Seniors also indicated the degree to which they expected to rely on part-time employment, loans, and scholarships to cover their educational expenses. The degree of financial need was thus determined. The extent of need did not seem to affect student attitudes toward attendance since the three sub-populations were similar to the state total.

Uncertain Educational Plans -- As noted earlier, students with uncertain educational plans numbered 2,497 (27 per cent of the seniors). About three-tenths of these students indicated they would attend a public two-year college, close to six-tenths said they might, and one-tenth said they would not. Especially significant is the fact that only one in ten was not favorably inclined.

Students were asked to indicate their main reason for their uncertainty of educational plans. The following were most frequently mentioned: (a) Don't know what occupation to prepare for (30 per cent), (b) My high school record may not be good enough (24 per cent), (c) May not meet entrance requirements of school of my choice (16 per cent), and (d) Don't have or cannot obtain money (16 per cent). The composition of the three sub-populations, based on these reasons, was similar to the state total. Pertinent to this study is the observation that 90 per cent of the students who chose each of the previously mentioned four reasons were favorably inclined.

Another question dealt with the planned post-graduation activity of these students. One-half said they would seek employment, 35 per cent intended to join the Armed Forces, 12 per cent were not sure what they would do, and the remaining were planning to undertake other activities. The three sub-populations were similar to the state total.

Of these students with uncertain educational plans, 62 per cent said they would like to continue their education within the next five years, 4 per cent had no plans for future schooling, and 34 per cent were uncertain. The "would" sub-population included more students who intended to continue their schooling but fewer of those who did not intend to do so and who were uncertain. The reverse was true of the "would not" group. The "might" group was similar to the state total.

No Educational Plans -- About 8 per cent of Hawaii's seniors (793) did not have any educational plans after graduation. Among the major reasons cited are the following: (a) fulfill military obligation (33 per cent), (b) high school record not good enough (19 per cent), (c) not interested in further schooling (15 per cent), and (d) lack of funds (10 per cent). The "would" sub-population had slightly greater proportions of those who cited military service and high school records as major reasons.

Of this group, 48 per cent intended to join the Armed Forces and 41 per cent planned to go to work. The "would" group had a slightly greater proportion of those who intended to join the Armed Forces.

About one-third of this group indicated a desire to continue their education within the next five years, one-fourth had no such desire, and two-fifths were uncertain. The "would" sub-population had more students with desires to continue

schooling, fewer of those with no desires and who were uncertain. The "might" group had fewer with no desire for further schooling and more who were uncertain. A higher proportion of those with no desire was found in the "would not" group.

Questions on Public Two-Year College

Seniors distributed themselves rather evenly among the five possible categories, relative to the greatest amount of money one could afford to pay annually for tuition:

22%	\$100 or less
20%	\$101-150
20%	\$151-200
16%	\$201-250
22%	More than \$250

The three sub-populations were similar to the state total except that a greater proportion of students who chose more than \$250 was in the "would not" group.

About one-half of the seniors indicated they would need to get a part-time job, scholarship, or loan to attend a two-year college, one-fourth needed no such assistance, and the remainder did not know. There was a tendency for greater proportions of those who needed financial aid to cluster in the "would" and "might" groups, while the reverse was true of those who indicated they had no financial need.

Students were also asked to indicate their field of interest were they to attend the two-year college. The distribution of the total was slightly different from that of the group having educational plans. The data in Table 24 show that:

1. Three-fifths were interested in college programs, one-fourth in technical programs, and 14 per cent in commercial programs.
2. The "would" sub-population tended to have a slightly greater proportion of students who chose commercial or technical programs but a smaller proportion of those who chose college programs. The reverse is true of the "would not" group. The "might" group was similar to the state total.

A closer analysis of the actual curriculums selected reveals that liberal arts, education, and business administration were popular among college programs; secretarial science in commercial programs; and automotive technology and electronics in the technical programs. The following indicates the fields of study most often selected by those who "would" or "might" attend a public two-year college:

<u>Would</u>		<u>Might</u>	
14%	Liberal Arts	19%	Liberal Arts
10%	Business Administration	13%	Education
10%	Education	9%	Business Administration
8%	Secretarial Science	7%	Engineering
7%	Electronics	7%	Secretarial Science
6%	Automotive Technology	6%	Automotive Technology

Table 24

**COMMUNITY COLLEGE ATTITUDES OF HAWAII'S HIGH SCHOOL SENIORS,
CLASS OF 1964, BY SELECTED FIELD OF STUDY**

Field of Study	Community College Attitudes							
	Would		Might		Would Not		Total	
	Number	Per Cent	Number	Per Cent	Number	Per Cent	Number	Per Cent
College	877	48	2,572	57	1,965	72	5,414	60
Business	310	17	689	15	248	9	1,247	14
Technical	590	33	1,162	26	485	18	2,237	25
Other	15	1	26	1	15	1	56	1
Don't Know	17	1	42	1	20	1	79	1
TOTAL	1,809	100	4,491	100	2,733	101	9,033	101

Source: Responses to 1963 Hawaii "High School Senior Survey".

A final question dealt with the students' perceptions of how many adults in their families might be interested in attending a public two-year college. The responses were as follows:

41% no adults
46% 1-2 adults
9% 3-4 adults
4% 5 or more adults

There was a tendency for seniors in the "would not" group to record no adult interest in the family and for those in the "would" group to indicate some perceived adult interest.

Summary of Responses to Community College Enrollment

Responses pertinent to a consideration of the establishment of community colleges may be summarized as follows:

1. Enrollment of Public Two-Year Colleges -- On the central question of possible enrollment at a public two-year college, almost 70 per cent of the present high school seniors indicated some favorable interest in public two-year colleges.
2. District Responses -- Responses by districts to the central question did not vary greatly, but Leeward and Windward Oahu and the County of Hawaii showed more favorable responses and the County of Kauai the least favorable.

3. Public and Private Schools -- There appears to be a significant difference in the responses of the public and the private schools. Whereas 72 per cent of public school seniors (21 per cent "would" and 51 per cent "might") react favorably to enrolling at a public two-year college, only 52 per cent (12 per cent "would" and 40 per cent "might") of the private school seniors were so inclined.
4. General Profile of the "Woulds"-- Those who indicated that they would attend a public two-year college, in greater proportions than is characteristic of the total senior class, tended to:
 - be the "average" student with a "C" grade;
 - be in the commercial, vocational, and general education curriculums in the high school rather than in the college preparatory curriculum;
 - come from families in which the parents were in the skilled and semi-skilled occupations; and
 - be uncertain about their plans to continue schooling after graduation from high school.²
5. General Profile of the "Mights"-- To a remarkable degree, those who indicated that they might attend a public two-year college reflected, in similar proportions, the major characteristics of the total high school senior population.
6. General Profile of the "Would Nots"-- Those who did not indicate an interest in attending a public two-year college fell in two groups with quite different characteristics: (a) a smaller group of those who indicated no or little interest in continuing schooling after graduation; and (b) those who had given much thought about continuing their education. These tended to be in the college preparatory curriculum in high school, have good grades, and come from families in which the parents are in the professional or managerial occupations.

Chapter IV

MEETING HAWAII'S NEEDS FOR POST-SECONDARY EDUCATION

Hawaii's needs in post-secondary education, in terms of quantity and kind, have been implied and sometimes explicitly documented in Chapters II and III. If citizens and public officials are to act rationally and effectively to meet these needs, certain major factors should be borne in mind, for the success of whatever plans are developed rests, to a large extent, on the ends to be achieved. If progress is to be made, these ends should be responsive to real needs and appropriate means for meeting these ends should be selected.

Focus on Needs

Among the major factors which are essential to the development of means to meet Hawaii's current and future demands for post-secondary education are the following:

Geography and Economy

1. The insular nature of our State with attendant problems in transportation and communication.
2. The centering of collegiate and cultural opportunities in Honolulu, partly due to the present and projected concentration of population in this area.
3. The changing demands and character of employment in a technological age. The Hawaii economy, like that of the rest of the nation, increasingly calls for workers with skills which require specialized technical training. The scientists, engineers, and other professionals who give direction to our technological advances require the services of greater numbers of highly trained technicians and semi-professional assistants.

High School Graduates

4. The increasing number of high school graduates and adults who are eligible for and capable of benefiting from educational programs on the post-high school level.
5. The ever increasing proportion of high school graduates who desire to continue their education. The surveys conducted by the Joint Committee on Guidance and Employment of Youth since 1952 and by this 1963 community college study clearly document this trend.
6. The number of academically able high school graduates who are not continuing their education. Of the seniors in the upper two-fifths of their graduating classes in 1961 and 1962, about one-third did not go on to four-year colleges and in 1962 one-fifth did not undertake any type of post-secondary education.

Technical Education

7. Recent and current demands for technical education. Although the full-time student enrollments in Hawaii's public technical schools are increasing over the years, the proportion of high school seniors who plan to attend trade and technical schools has declined somewhat in the last few years (31 per cent in 1958, 20 per cent in 1961, and 12 per cent in the 1963 community college questionnaire). Moreover, the technical schools, particularly in Honolulu, have not been able to admit many who apply for their programs because of limited facilities and other reasons. Nevertheless, in recent years, full-time students enrolled in technical schools number about one-sixth of the high school senior classes in the same year.

8. Current restrictions on technical school programs. Hawaii's public technical schools offer a variety of course concentrations, some of which might be termed "pre-professional" if characterized by collegiate level instruction and requirements. Present laws do not authorize the technical schools to grant collegiate credits and degrees.

University Education

9. The rapidly increasing enrollments at the University of Hawaii. In 1975 the University of Hawaii is expected to have an undergraduate population which is 2.5 times that of 1960-61 and a graduate population more than 5 times that of the base year.

10. The University's admissions policy. Currently about 65 to 75 per cent of high school seniors who apply for University admission are accepted and about one-half of the applicants actually register.

11. The inability of many to complete work towards a baccalaureate degree at the University. The relatively low retention rate at the University, while partially explained by the fact that many students transfer to mainland institutions during the course of their baccalaureate work, probably means that some students who were originally considered potential collegiate calibre were unable, for some reason, to complete their work.

12. The consideration and introduction of two-year programs at the University. In recent years, the University has given increased attention to the advisability of instituting two-year programs on its campus. It approved of such programs in dental hygiene and nursing with the proviso that they be transferred to two-year college campuses when possible.

13. The large numbers who go to the mainland for collegiate education. A considerable part of Hawaii's demands for higher education have been met by institutions in the other states; a third of Hawaii's high school graduates who go on to college enroll at an institution on the mainland, particularly on the West Coast.¹ This "going away to college" has its advantages and will probably continue for some time, but this pattern is becoming more expensive and more difficult as mainland institutions increase their tuition rates, especially for out-of-state students, and raise the qualifications for entry by out-of-state students in order to give priority to the increasing number of native students.

Actions by two state legislative bodies in 1963 are indicative of this mood: the Oregon Legislature repealed the law which heretofore allowed Hawaii residents to enroll at Oregon's public colleges without paying out-of-state tuition rates, and the California Legislature directed its public junior colleges to begin in the Fall of 1964 to charge out-of-state tuition fees. Thus, the demand for increased higher education opportunities in Hawaii may be more keenly felt in the immediate future.

14. The nature of professional education. Not only are greater numbers going to colleges today but more are also undertaking programs of training which require more than four years to complete. This can be documented in the increasingly larger numbers who now attend graduate and professional schools. Such a trend has implications for the nature and costs of undergraduate training--that it should perhaps be more general in nature as specialization takes place on the graduate level and that it should be as inexpensive as possible as the period of training is prolonged and the cost of advanced training rises.

High School Class of 1964

15. The response of high school seniors to public two-year colleges. Approximately seven-tenths of the Senior Class of 1964 indicated a favorable attitude toward possible attendance at a public two-year college; 20 per cent said they would attend, and 49 per cent said they might. Seniors in Leeward and Windward Oahu and the County of Hawaii were especially favorable to the possibility.

16. The nature of students who are most favorably inclined towards two-year colleges. Student responses to possible attendance seemed to be related to economic and academic factors. The average student, pursuing a non-college preparatory curriculum, coming from a home in which father was a skilled or semi-skilled worker, was apt to say he would enroll.

17. The number of seniors who are uncertain about continuing their education. Twenty-seven per cent of the seniors indicated that they were uncertain about immediate post-graduation education. The major reasons given for this uncertainty were indecision concerning occupational goals and probable unacceptability of high school records at collegiate institutions.

In addition to the above, there is also the desirability on the part of local communities to locate schools and colleges within their boundaries. This aspect of educational demand has not been mentioned previously in this report but it is a fact that this project in part stems from local interests in establishing within their counties additional educational institutions. These interests are too often identified as economic, but they are also to be associated with the desire to make more readily available to all citizens, young and old, the social and cultural as well as the educational opportunities and advantages which an educational institution engenders.

Besides these factors, characteristic of Hawaii but not necessarily confined to it, are two other important considerations which concern the entire nation:

1. The necessity and desirability of understanding and coping with the complexities of contemporary life. Technological advances, especially in communication and transportation, have increased the mobility of men and ideas not only within our nation but throughout the world. Educational opportunities should be continuously available to enable one to understand and to participate in attempts to control the complex forces of modern life, thereby enriching one's own personal life.

2. The realization of the American ideal to develop the talents of each individual to the utmost. Education has long been recognized as the major medium through which this goal can be implemented. It can be seen in terms of our faith in education and in our historical attempts to equalize educational opportunities; a generation ago these efforts were concentrated on the high school level, today they focus attention upon higher education.

Desirable Features of a System to Meet Needs

Now that the needs have been brought into focus, attention can be turned to defining the characteristics of a system which will most effectively meet these needs.

First of all, there is no doubt that there is need for additional post-secondary education facilities. The vital questions concern the nature and character of this expansion. It is suggested that the development of plans, whether in terms of new or additional facilities, contain these features.

1. Quality. Whatever the nature of the expansion, efforts should be made to provide quality training in all fields of endeavor. Expansion and quantity are too often linked with the deterioration of quality. In the field of post-secondary education, this does not mean that only the traditional collegiate courses should be emphasized, nor that only Ph. D.'s should be recruited as faculty members. It means that, whatever the subject matter, excellence in performance on the part of the student and teacher is to be encouraged. A first-rate faculty should be assembled and maintained for the success of an educational institution depends, to a large degree, on an able and dedicated faculty. Recruitment should be state and nation-wide. Adequate salaries and good working conditions should be provided.

It is believed that a free learning environment will contribute to this pursuit of quality. On the post-secondary level, the campus facilities provided by the American college furnishes such an atmosphere. It has often been recognized that a student in college benefits from and grows to maturity on a campus which extends beyond the classroom. His life is enriched by co-curricular activities of athletics, concerts, lectures, and a campus newspaper, by the facilities of a student union and a library, and by the general freedom to act as a responsible adult in the rather congenial atmosphere of a college campus. This experience of living within a collegiate environment, so intimately associated with American higher education, should prove to be as meaningful and beneficial to a large portion of high school graduates who today do not enroll at a four-year college or university as to those who do.

2. Accessibility. In view of the growing numbers who desire and need post-secondary education and the fact that a number of able students are not continuing their education, learning facilities should be made readily accessible: (a) geographically, by decentralizing facilities; in Hawaii, this means the establishment of more facilities outside of metropolitan Honolulu, especially on the neighbor islands wherever feasible; (b) financially, by keeping tuition and other fees at a minimum and making it possible for one to attend these institutions while residing at home; and (c) academically, by allowing more students to attempt collegiate level programs than has heretofore been the case.

3. Comprehensiveness. Educational needs on the post-secondary level are varied. The new facilities should offer a variety of programs for college transfer, general education, or vocational purposes. A comprehensive program especially meets the needs of those who are uncertain or mistaken about their occupational goals. Especially essential for Hawaii are two-year programs of a semi-professional or technical nature, such as in engineering technology, nursing, and data processing.

4. Counseling Services. Counseling services are vital to any expansion of post-secondary education. Occupational guidance, a need already cited, is especially crucial at this stage. The attrition rates at the freshman and sophomore levels at the University also point to the need for counseling and guidance services.

5. Flexibility. The new facilities should have the flexibility to cope with today's rapid changes in occupational skills required by our technology. Flexibility is desired not only in the nature of programs but also in their scheduling. Short-term and evening classes may be necessary to meet the needs of adults for continuing education and retraining or for the acquisition of new skills.

6. Community Services. Full advantage should be taken of new or additional educational facilities so that they may provide as many communities as possible with library and meeting room facilities, lecturers and consultants, and plays and concerts.

Alternative Plans for Meeting Hawaii's Needs

In meeting the demands for more opportunities for post-high school education in Hawaii, three distinct courses of action can be taken by the public, involving both the University of Hawaii and the Technical Schools of the Department of Education:

Plan A. Expand existing facilities at both the University of Hawaii and at the Technical Schools.

Plan B. Build additional branch campuses of the University of Hawaii and permit the Technical Schools to engage in collegiate level work.

Plan C. Establish a system of community junior colleges.

Each of these plans is discussed in this section and advantages and disadvantages are weighed. A recommendation is also made on the plan which seems most advantageous for Hawaii at this time.

Plan A

Plan A calls for the expansion of existing facilities at the University of Hawaii and at the Technical Schools. It involves primarily the expenditure of funds for buildings, additional lands, equipment, and faculty. It does not contemplate many new programs; it calls for more and greater efforts along basically the same lines that these two institutions have heretofore rendered.

Although this plan is closest to the status quo, new programs will probably be added to meet current and new demands and will fit within the basic framework of the institutions. For example, the University might: (a) add more specialized curriculums on both the undergraduate and graduate levels, such as in the fields of journalism, American studies, and biophysics; (b) increase the number of fields in which the M.A. and Ph. D. degrees can be awarded; (c) also add more two-year programs (police science, engineering aide) besides the two in dental hygiene and nursing now in operation or authorized. However, admission requirements and "standards" will remain basically the same. The Technical Schools might add technical training in areas such as data processing and commercial art. These will not carry collegiate credit.

This plan has the advantage of convenience and relative economy. It will call for fewer adjustments and perhaps a smaller outlay of public funds. In essence it is a minimal program; this at least the State will be forced to do in the years to come.

Although Plan A probably will be able to maintain present quality of instruction at both the University and the Technical Schools and also enable both these institutions to offer additional programs to their respective student bodies, the plan is not characterized by a truly comprehensive curriculum nor by accessibility--geographical or academic.

Plan B

Plan B differs from Plan A primarily in that there will be a substantial expansion of facilities and programs at the University and the Technical Schools.

For the University, besides the expected expansion of programs discussed under Plan A, there might be the creation of branch or extension campuses similar to the one now in operation in Hilo. These branches may be located in the Windward and Leeward areas on Oahu and on the islands of Maui and Kauai, if criteria for establishment are met. Admission requirements, curriculum patterns, and standards of collegiate achievement will reflect those of the Manoa campus.

The expansion of the Technical School programs under Plan B might: (a) likewise involve the establishment of new plants in population centers such as in the Leeward and Windward areas of Oahu; and (b) also contemplate the amending of State statutes to authorize the Technical Schools to engage in college-level

programs in the more complex technical fields--such as in electronics, engineering technology, and medical technology.

The advantages of this plan are that it overcomes the obstacles of geographical inaccessibility and of over-crowding. Branch campuses for the University may permit useful instructional experimentation which may assure successful collegiate careers for a great number of students who currently fail to complete their baccalaureate work. Authorizing the Technical Schools to offer collegiate level technical training will broaden the range of programs and will probably result in enrollments of a greater percentage of our youth. Furthermore, this enables the community to have technicians trained on a higher level, in tune with today's technology.

Plan B, in general, should attract and provide educational services for larger numbers than are now being served by the existing institutional arrangements. But branch campuses, with essentially the same admission requirements and curriculums as now exist at the University, will still be beyond the reach of or not interest those who today cannot or do not desire to go to college. Accessibility, financial and academic, is not provided.

Technical Schools, if given the authority for collegiate programs, must change their emphases and image to attract the many who today have little interest in enrolling at a technical school, even though this is where their most appropriate training can be undertaken. Two other problems exist: (a) more funds may be necessary to support two separate institutions part of whose programs overlap, for collegiate level instruction in the Technical Schools will probably require some staff members in the liberal arts who are ordinarily found on college faculties and (b) efforts may be required to coordinate the collegiate level programs of the University and the Technical Schools so that duplication is at a minimum.

Plan C

Plan C calls for the establishment of a type of educational institution quite new to Hawaii--the community junior college. In essence this institution offers three types of programs: (a) college parallel which enables students to complete the first two years of regular college studies or to take courses for general education purposes, (b) technical and vocational which prepares students to work as technicians and at semi-professional levels, and (c) community services which enable adults to continue their education and the community to enjoy cultural activities.

Critics point to the difficulty, if not impossibility, of any educational institution being able to accomplish such an ambitious program. Its comprehensiveness may present problems of organization and staffing. The establishment of a new system may be the most demanding of our time and money; it may require institutional readjustments and a reorientation in educational goals.

Despite these problems, community junior colleges--located in various parts of the State, offering comprehensive programs at reasonable rates, and with

liberal admission policies--are recommended for Hawaii because they most effectively meet the post-high school education needs of the State: (a) they provide for the types of technical and semi-professional training which are generally not now available in the State; such training programs seem to fall somewhere between the programs now offered by the University and by the Technical Schools; (b) they are most attractive to those high school seniors who are uncertain about continuing their education but seem to want an opportunity to do so; and (c) they facilitate the decentralization of higher education facilities throughout the State and offer general educational and cultural opportunities to a greater number of adults. It is obvious that such a program is characterized by accessibility and community awareness, as well as by comprehensiveness and flexibility.

Since this plan (a) marks the greatest departure from the existing educational pattern in Hawaii, (b) involves a type of institution which is of rather recent origin on the educational scene, and (c) is deemed to be the most appropriate in meeting Hawaii's needs, the purposes and nature of community junior colleges as well as the history of this idea in Hawaii are discussed at length in the next chapter. Details on a community college system for Hawaii are found in Chapter VI.

Chapter V

THE COMMUNITY JUNIOR COLLEGE: ITS GENERAL NATURE AND ITS HISTORY IN HAWAII

Today the junior college is recognized as an integral part of higher education. It is a major instrument in putting college opportunity within reach of aspiring students. It serves a key role in a democratic system of higher education that recognizes individual differences and the social worth of a wide range of interests, capacities, aptitudes, and types of intelligence. The opportunities for learning which it affords warrant attention by any person interested in benefiting from or supporting higher education.

Edmund J. Gleazer, Jr.
American Association of Junior Colleges

The community junior college, a rather recent innovation in higher education, is now the educational institution showing the fastest rate of growth in terms of enrollments and new campuses. But it is also subject to "growing pains"--often-times there is misunderstanding of the purposes of a community junior college as it seeks to establish its identity as a full-fledged partner in higher education.

This chapter discusses the nature of the community junior college, briefly describes its growth in other states, and summarizes Hawaii's background in considering the junior college idea.

Its General Nature

Problem of Nomenclature

To begin with, these educational institutions do not have a uniform designation. This is partly due to their rapid growth and evolvement in recent years. In an earlier day, these institutions were generally referred to as "junior colleges" and in many instances still retain this nomenclature. They were looked upon as primarily "junior" to the four-year colleges or universities and usually restricted programs to a duplication of those of the first two years of a regular university. More recently, they have taken on many programs in addition to the regular academic college programs; indeed, they have taken on far-ranging community responsibilities in terms of advancing technical training for adults as well as for the youth of the community, of encouraging adults to initiate work towards collegiate degrees, and of sponsoring many activities which contribute to the civic and cultural life of the community. Thus, they are now more often referred to as "community colleges." The more inclusive term, "community junior college," seems to have come into use to encompass the greatest number of these institutions whose programs may vary somewhat but whose purposes are essentially the same.¹

It is interesting to note, although perhaps not significant, that the usual designations for these institutions in the three states where they have recently shown the greatest expansion differ: Florida generally uses the appellation "junior" New York uses "community," and California seems to indicate a trend toward the dropping of the adjective preceding "college"--thus, Foothill College, College of San Mateo, or Riverside City College.

Despite the variety in nomenclature, these institutions have acquired an identity of their own. They constitute "a new kind of college--standing between the high school and the university--offering broad programs of experiences of value in and of themselves, neither post-high school as such or pre-college as such."²

Purpose and Objectives

Common to all community junior colleges is a basic philosophy, well expressed in the following lines:

In a democracy the individual comes first. We are irrevocably committed to the principle that every individual should have the opportunity to progress as far as his interests and abilities will permit.

This means that everyone who can profit from a college education should have the chance to acquire it, but it does not suggest that everyone should have the same education. On the contrary, diversified, well-planned education, research and training programs suited to the differing capacities of individuals, and designed to meet the needs of society, constitute the ideal system of higher education in a democracy.³

The reliance on education for the development of human resources has characterized the United States from its early history.

Comprehensive Programs -- The community junior college is clearly seen as an institution which has come into being to meet the new challenges of today -- the challenges of technology, complexity, and impersonality.

This institution is an American social invention. It is an instrument of tremendous potential. It can motivate youth who have had little hope for learning beyond the high school. It can lift the sights and strengthen the efforts of the generation wanting to go beyond their fathers' achievements. It can stimulate the creativity and slumbering interests of adults. It can provide the means for training that lead to a higher level of employment. It can train for the new skills demanded by a changing technology. It can serve as a focal point for community identification.⁴

The community junior college visualizes a new type of education or a new combination of educational programs to meet current problems. It attempts to do this by offering three basic types of programs:

1. College parallel programs which consist of the first two years of regular college studies. These may be taken for transfer to a four-year college program or for general education.

2. Technical and vocational programs which prepare students to work as technicians and at semi-professional levels in such fields as engineering, health services, and business administration. Training in nursing, police science, library assistantship, and the like are oftentimes included. Most of these curriculums extend over a two-year period, but short-term programs are also conducted.
3. Community services of various types, including programs and courses at night for adults, concerts, lectures, plays, art exhibits, and library facilities. Community colleges attempt (a) to make readily available to all segments of the population the opportunity for a college education and (b) to bring to their communities the benefits of organized intellectual and cultural activities.

In keeping with their comprehensive nature, community junior colleges usually offer a variety of guidance and counseling services. These services are sometimes listed as one of the major programs in a community college.

After successful completion of two-year programs, community junior colleges usually confer an Associate in Arts (A.A.) or an Associate in Science (A.S.) degree.

Accessibility -- The community college is also characterized by accessibility. It is accessible geographically; the college is located in such places as will permit the vast majority of its students to commute from their homes.

The community college is also accessible to a greater number of persons because the costs of attendance are relatively low. Although the tuition rates are usually below those for four-year colleges, the greatest savings are realized when one does not have large expenses for travel and for room and board away from home. Furthermore, there is accessibility in the sense that many more communities can afford to sponsor a two-year institution but not a four-year college which needs a higher per student expenditure for upper division work than for lower division instruction.

The community junior college is also more accessible in terms of admissions policies. It tends to have an open door, and is especially helpful to "late bloomers" and those who otherwise would not be admitted to college because their high school records and test scores are below the standards set by a particular institution. It is also a boon to those adults with ability who for some reason or other do not have the equivalent of formal high school education. The variety of programs, appealing to a diversity of interests and abilities, may also motivate more to continue post-high school education.

Criticisms -- Since the community junior college attempts to serve such a diversity of talents and interests, it is sometimes criticized for undertaking an impossible task. In addition, the community junior college is criticized as a movement which dilutes if not violates the primary purpose of higher education which is the development of the intellect. This school of thought, which may be labeled "rationalist," looks upon college as an array of the traditional academic subjects.

Opposed to this school are the realists:

The realist...conceives of men as sharing common needs--as citizens, as individuals, as members of families. He feels that there are common purposes for the education of all for these responsibilities. Yet he realizes that these common purposes will be achieved in differing degrees by men of differing abilities and that different patterns of educational experiences may well lead men toward the same objectives. He feels that education consists in progress toward a goal rather than solely in the achievement of it. At the same time, the realist sees beyond the likenesses of men to their differences, and so he attempts to establish differentiated courses of specialized nature to train men for their occupations.⁵

The "realist" view of higher education was adopted by the President's Commission on Higher Education:

...the social role of education in a democratic society is at once to secure equal liberty and equal opportunity to differing individuals and groups, and to enable the citizen to understand, appraise, and redirect forces, men, and events as these tend to strengthen or to weaken their liberties.

In performing this role, education will necessarily vary its means and methods to fit the diversity of its constituency, but it will achieve its ends more successfully if its programs and policies grow out of and are relevant to the characteristics and needs of contemporary society. Effective democratic education will deal directly with current problems.⁶

Growth and Expansion in the United States

Junior colleges had their beginnings in the late 1800's. In 1900 there were about eight private junior colleges with an enrollment of approximately 100 students. The first public junior college was established at Joliet, Illinois, in 1901. The first state law on junior colleges was passed in California in 1907. In 1930 there were 400 junior colleges; in 1952 almost 600; and today there are approximately 700 junior colleges. Junior colleges are being established at the rate of about 30 per year. The fastest growing segment of this movement involves the public community colleges.

The phenomenal growth of the junior colleges can also be seen in their enrollments. In the Fall of 1963, nearly one million full- and part-time students were enrolled, over 85 per cent in public junior colleges.⁸

At least one student in every four beginning his program in higher education is enrolled in a junior college today. "In several states, such as New York, Michigan, and Mississippi, there is a reasonable expectation that within a few years at least half of the beginning college students will go to junior and community colleges. Moreover, it is anticipated that in California about 80 per cent of all college-bound high school graduates will enroll in junior colleges by 1970."⁹

Community junior colleges are basically the responsibility of local communities in most areas. But they are receiving increasing attention not only on the state level but from the national government as well. President Kennedy, in proposing federal aid for higher education, stated that:

... absence of college facilities in many communities causes an unfortunate waste of some of our most promising youthful talent. A demonstrated method of meeting this particular problem effectively is the creation of two-year community colleges.

In recognition of the integral role of the junior colleges in higher education, the Higher Education Facilities Act enacted by the Congress stipulates that 22 per cent of a State's construction funds granted under this Act shall be used for public junior colleges and technical institutes.¹⁰

The growth of the junior college and the factors which have contributed to this expansion are summarized by Edmund J. Gleazer, Jr., the Executive Director of the American Association of Junior Colleges.

The public community college has emerged in recent years as one of the most vital forces in higher education. The past decade has seen unprecedented growth in this field, with more than a hundred new colleges established during that period. A variety of pressures has contributed to this growth. Ever-increasing numbers of students want to go to college. Changes in technology, the advent of automation, have resulted in demands from government and industry for technical and semiprofessional personnel with at least two years of college. Society is demanding that most young people be given an opportunity for education beyond high school--and the public junior college is providing the opportunity.¹¹

Junior Colleges and Hawaii

According to the 1963 edition of American Junior Colleges, Hawaii has only one recognized junior college. This is Maunaolu College at Paia, Maui, a coeducational institution affiliated with the Congregational Church. The school offers a liberal arts curriculum and it is noted that almost all of its students transfer to four-year colleges. The October 1962 enrollment for this campus, founded as a junior college in 1950, is reported as 195.

In the previous edition of American Junior Colleges published in 1960, the Church College at Laie, Oahu, was the only institution listed. It has since become a four-year institution although it continues to offer associate degree

programs and a college certification program.

Despite the limited experience of Hawaii with ongoing junior college establishments, concern for post-high school education with suggestions for junior college type facilities has been increasingly evident.

Studies of Post-Secondary Education

All of the recent studies dealing with post-high school and higher education call attention to the possible need for junior or community colleges. The earlier studies discussed this in terms of education in the 13th and 14th grades. In 1942 the Community Survey of Education in Hawaii, a report of the Committee of Fifteen (composed of political, business, and educational leaders), indicated "a need for the development of a 13th and 14th year program which would offer continued commercial education between the time of high school graduation and the age at which most young people are employed."¹²

A curriculum survey of Hawaii's schools, conducted by Edgar M. Draper and Alice H. Hayden under the auspices of the American Council on Education in 1943, recommended the addition of the 13th and 14th grades to the secondary schools. The report of that survey also stated that: "The creation of a junior college might present a desirable solution in certain communities on the outside islands which have population centers justifying the development of this new institution."¹³ This survey was authorized and requested by the Territorial Legislature.

A more recent comprehensive survey of public education in Hawaii specifically recommended the establishment of a community college system under the Department of Public Instruction.

Community Colleges

The further development of vocational education throughout Hawaii is related to the development of regional community colleges on the larger islands. These community colleges could be developed around the nuclei of the present technical schools and would provide not only for retention of the specific trade training, which they now include, but would provide for the further extension of this training.

The present technical school could well constitute the technical division of a modern community college, which provides post-high school educational offerings for the following four population groups: (1) Those youth who desire specific vocational preparation in a recognized trade or industry; (2) Those youth who desire to complete the first two years of preparation for the Bachelor's and advanced degrees; (3) Those youth who desire to extend their competencies through a program of general education at a higher level of maturity; (4) Adults in the community who wish to extend their educational competence in any field--academic, vocational, or cultural.

The development of such a system of regional community colleges, having both terminal and transfer functions, is thoroughly consistent with continued growth of the University of Hawaii. The University of Hawaii has already faced many problems in connection with needed expansion of its facilities. The growth of state universities, and particularly those on the West Coast, indicate that this expansion has only begun. The community college will

never replace the university, even at the lower division level. It will provide lower division training for some students who will transfer to the university for Bachelor's and graduate degrees. This statement implies that the transfer work at the community college must be thoroughly comparable to lower division work at a university and must carry equal credit.¹⁴

In 1959, the Governor's Committee on Education Beyond the High School discussed "community colleges" in these terms.

It has been proposed that there is a need in the Territory for "community colleges" to serve out-of-school youths, adults, and the aging groups. ...

Determination of whether or not community colleges are in fact needed and economically reasonable for the Territory of Hawaii will not be attempted in this report. It is a question which should be resolved only after close study, with it as the central focus of study. It seems appropriate here to merely enumerate some of the basic considerations and alternatives which may be involved.

Community colleges will require facilities, staffs and operating budgets. The present technical schools and perhaps some secondary schools might well serve as the nucleus. Nonetheless some classroom area, additional staff and extensively extended library facilities would be required. Certainly if collegiate level work for transfer to the University or other collegiate institutions were included, staff of comparable training and ability, and comparable library facilities would be required to maintain the quality level of the collegiate institutions. These needs must be balanced against the needs of the existing collegiate institutions for facilities, staff, and operating budgets. Particularly is this true with the developing competition for qualified faculty and the crucial need for upgrading of college teachers' salaries.¹⁵

A study "to determine the ideal role of the community college as one aspect of the total educational program, and to investigate the possibilities for the upward extension of secondary education in Hawaii" was the subject of a doctoral dissertation by Teruo Ihara in 1959. The study involved high school principals, P.T.A. presidents, and concentrated on the high school students on the island of Kauai. Among the major conclusions were the following: "(1) the facilities of the technical schools of the Department of Public Instruction are adequate to meet present needs for this type of post-high school education; (2) Hawaii has adequate student potential to establish and maintain at least one community college in each of the three 'Neighbor Island' counties, and possibly three or four community colleges in Honolulu County."¹⁶

The 1962-63 survey of higher education in Hawaii, conducted by personnel of the U. S. Office of Education, made the establishment of community colleges one of its major recommendations. The principal recommendation reads as follows:

(B-3) That there be established progressively, over the next decade, six administratively integrated "University of Hawaii--Community Colleges" at which programs of general studies, freshman and sophomore level arts and sciences, and occupational curriculums of up to 2 years of formal study will be concentrated; that there be

established wherever possible by making use of existing facilities at the technical schools in Hawaii; and, further, that the planned order for progressive developments of these community colleges be as follows: one at Hilo; one by improvement and expansion of Honolulu Technical School; one on Maui and another on Kauai, again by gradual expansion and strengthening of the technical schools on each of these islands; a new institution on windward Oahu; and another by relocation of programs now at Kapiolani Technical School to the Waipahu-Wahiawa area of Oahu.¹⁷

Legislative History

The junior college idea also has a legislative history in Hawaii. Since the 1941 session, bills to establish junior colleges have been regularly introduced. In 1941, a Senate Concurrent Resolution (S.C.R. No. 26) was adopted which requested the Department of Public Instruction to seek two parcels of Territorial lands at Waiakea, South Hilo, "for the purpose of erecting thereon at a future date, a junior college or vocational school, or both if warranted" However, since the adoption of this resolution in 1941 till the passage of legislation authorizing funds for this community college study in 1963, the bills dealing with junior colleges have not been favorably acted upon by the Legislature.

The 1950 Constitutional Convention considered a proposal to specify that junior college education would be administered by the University of Hawaii. However, the Education Committee concluded that the matter was not pressing and could be left to future legislative action.¹⁸ The Report of the Committee of the Whole observed that the general language of the Constitutional provision on education would authorize the State to establish and support public junior colleges.¹⁹

Legislative concern over post-high school education is also reflected in discussions held during an interim briefing session on Maui in June 1956. The minutes of this meeting are pertinent to this study.

The principal topic for discussion at this meeting concerned the respective roles of the Department of Public Instruction and the University of Hawaii in providing junior college education or its equivalent. Dr. Bachman made the suggestion that the University continue to be the sole territorial institution which grants college credits, but that it leave to the Department of Public Instruction responsibility for conducting non-credit vocational and avocational courses for adults. Exception was made only in the cases where the University has special facilities (perhaps ceramics), or where a professional group was being served through a refresher course or seminar (such as dentists or public administrators). Otherwise, this proposed division of labor would have the University withdraw from the offering of non-credit courses.

With respect to junior colleges, Dr. Bachman expressed the opinion that the establishment of a junior college on Oahu is unwarranted for the following reasons: (1) there are four private junior colleges on Oahu, three in urban Honolulu and one at Laie; (2) the DPI has an extensive adult education program in operation; and (3) the University has a well attended credit program in its extension division. Nor was he of the opinion that the establishment of college facilities on Maui and Kauai is presently justified by the anticipated enrollment, but that the University stood ready to offer a one or two year program in either county if so directed by the legislature.

Mr. Chamberlin fully concurred in the division of labor between the DPI and the University outlined by Dr. Bachman. He described the adult evening program of the public schools, plus the expanded technical courses, as offering terminal programs at a non-college level for persons seeking either general or vocational education. These could be expanded as the University withdraws from most of its non-credit program.²⁰

In a subsequent memorandum drafted to answer questions raised at the briefing session, President Bachman of the University of Hawaii stated that (a) the operation of the branch at Hilo appeared to have increased enrollment by Hilo students at the University by 15 to 20 per cent, and (b) a similar branch would be feasible on Maui but not on Kauai.²¹

The University of Hawaii ^{and} Junior Colleges

Recently the University of Hawaii has taken an active interest in junior college education. As the state agency charged with the responsibility for public higher education in Hawaii, the University has maintained that public junior colleges, if developed, be administered by the University. Presentations to this effect were made before the 1950 Constitutional Convention, during legislative hearings on this matter, as well as at the legislators' briefing session of 1956.

In March, 1960, the Board of Regents of the University adopted the following policy statements regarding a "single State-Wide University Public System of Higher Education."

It was duly moved, seconded, and voted to adopt the following three policy statements regarding a single State-Wide University Public System of Higher Education:

- a. The University of Hawaii should continue to be responsible for academic work beyond the 12th grade. The Regents are convinced of the necessity for a single state-wide University public system of higher education.
- b. The Administration of the University is authorized to proceed immediately to prepare a plan of development with approximate time and place priorities and cost estimates to implement such a single state-wide system. Such a plan shall include the establishment of University centers of instruction in areas away from the main campus, whenever it is indicated that qualified students are available in such quantity as to make a center economically feasible and academically sound.
- c. The plan of development of a single state-wide University system of higher education will be subject to constant review by the Board in the light of economic and population considerations.

In 1959-60, a "self-study" was conducted at the University by the Study and Development Commission composed of faculty members. The Commission in its report recommended that "the University consider the instituting of a two-year terminal academic degree program leading to the Associate in Arts or Associate in Science degrees"²² and also recommended the development of branch campuses: "In the main, these branches should be considered as two-year institutions, creating as their number expands a community college system responsive directly to the University."²³ There followed a general discussion of the standards, staffing needs, minimum

enrollments, and the desirable administrative organization of such branches under a "Dean of Community Colleges."

The University of Hawaii Faculty Senate during recent years took the following actions which deal with junior college programs:

1. In response to the proposal that an Institute of Engineering Technology be established at the University, the Faculty Senate Committee appointed to study this suggestion concluded that (a) the feasibility of this proposal required an intensive study not only of the nature of such a program but also of Hawaii's needs for engineering technicians, and (b) this question "must be considered in a broader sense (to include) various types of technology such as medical, dental, nursing, etc., and also in terms of whatever technical assistance program will be considered by the East-West Center."²⁴ The Committee noted that a consulting firm was soon to be hired by the Board of Regents to study University development and therefore recommended that "the President request the Board of Regents to include in their charge to the consulting firm the investigation of the questions of the need for programs in technological training, including the proposed program in Engineering Technology, and of the desirability as well as feasibility of establishing such programs under the auspices of the University."²⁵ This recommendation was adopted by the University Faculty Senate at its meeting on February 1, 1961.

2. The same Committee underwent a change of name (from "Senate Committee on Institute of Engineering Technology" to "Senate Committee to Study Proposals for Non-Degree Programs") and reported favorably on the establishment of a two-year dental hygiene program, with the proviso that "the program be re-evaluated in two years, and that serious consideration be given to transferring the program at that time from the College of Nursing into a new division of the University to be especially organized to administer two-year terminal programs."²⁶ Also approved by the Faculty Senate at this time were two policy statements regarding two-year terminal programs.

1. As a matter of basic policy the Senate holds that the values and purposes of sub-professional training are necessarily distinct from, yet at the same time are contributory and by no means opposed to, those of professional education. For that reason, to keep means and ends clear and to specify responsibilities, the Senate urges that the two-year terminal programs be kept separate from the four-year College programs and that they be administered within an integrated division of their own.
2. The Senate wishes to go on record as recognizing and endorsing the principle that the University of Hawaii is the sole public institution in the State of Hawaii responsible for providing opportunity beyond high school for education at a collegiate level. Unless or until this responsibility is altered, the University must continue to adapt its services and clarify and redefine its standards in the light of the needs of the times.²⁷

3. In a meeting on January 23, 1963, the Faculty Senate recommended that the Regents approve a two-year nursing program:

Recognizing the weight of evidence favoring a two-year terminal program for nurses in Hawaii and accepting the responsibility of the University to meet this demand, the Regents indicate herewith their intention to initiate such a program on the Manoa Campus at the earliest time funds are made available and satisfactory academic and faculty arrangements can be made. Present indications are that this will be in September 1964.

The Regents moreover state their intention to regard this as a "pilot" two-year terminal program (leading to an Associate of Arts degree), to be transferred to an Oahu community college when and if one is established under University administration.

4. At the same meeting on January 23, 1963, the Faculty Senate went on record in favor of the major recommendations on community colleges made by the HEW report. The following resolutions were adopted:

Resolution 1: That the University administration proceed with the establishment, as integral units of the State University system, of community colleges as rapidly as (a) adequate funds are appropriated, and (b) potential enrollment (according to the formulas presented in the HEW Report) justifies; that the offerings in these community colleges be lower division courses, and that standards of staffing and instruction in the community colleges be the equivalent of those maintained on the Manoa campus for courses which are comparable.

Resolution 2: That the technical schools now operated by the State Department of Education be incorporated into the proposed community colleges as recommended by the HEW Report, and that the community colleges offer technical training, terminal general education, and lower division courses which will be acceptable in transfer in the case of students who qualify for admission to upper division work in the various colleges on the Manoa campus.

Concluding Remarks

It is evident that the community college concept has a history in Hawaii, although much of it is recent. Surveys of public education and higher education in Hawaii, sessions of the Legislature, and activities of various groups at the University of Hawaii indicate consideration of the community college idea on the state level. While many past recommendations have much in common, they differ in some respects. For example, there is a difference of opinion on what should be the administrative agency of a community college system, but there seems to be agreement that Hawaii needs an expansion of opportunities in post-secondary education.

Chapter VI

A STATEWIDE COMMUNITY COLLEGE SYSTEM FOR HAWAII

The prospect of a system of community junior colleges in each state is an attractive one to many educators and to many legislators. However, the ultimate success of any community junior college system depends upon the way in which the initial idea is executed. A community junior college system is desirable only if it has been carefully planned and developed to meet genuine educational needs. Community colleges will be little more than expensive white elephants if . . . they are "scattered promiscuously over the land in response to political whims or social pressures."

Winfred L. Godwin¹

Justification is found in Chapter IV for selecting a community college system as the most effective means of meeting Hawaii's needs in post-secondary education. This chapter sets forth the chief characteristics of the proposed plan for a community college system, recommends action for each of the major islands, and concludes with a plan for the implementation of the proposed system.

Major Features of the Proposed System

There are various ways in which a community college system may be established and administered. This proposal for Hawaii, while attempting to fulfill the purposes of the community junior college, suggests a genuine statewide system, having organizational features which depart from those of the traditional mainland pattern. These modifications are believed to be not only compatible with Hawaii's smaller size, insular character, tradition of governmental centralization, and unique educational organization, but also the most promising in providing for the specific needs of Hawaii's youth and economy.

In addition to the statewide character of the proposed community college system, two other major recommendations are made: that the Board of Regents of the University of Hawaii be the administrative agency and that the public technical schools be converted into community colleges. Recommended policies regarding curriculum, admissions, and tuition are also included. Each of these major recommendations is discussed below.

Statewide Organization

The community college system in Hawaii should be a coordinated system, one which attempts to meet needs on a statewide, rather than on a local, basis. The Hawaii system should be financed from state sources and should be under the direction of a state-level board. The overall size of the State, its heavy concentration of population in the single City and County of Honolulu (79 per cent

according to the 1960 census), and the centralized governmental and educational organization are major factors for this recommendation.

Variety of Campuses -- A statewide system means that the State's various community colleges will not all be alike, especially in terms of the number and varieties of programs offered. The size and resources of the State require prudent planning. Basic programs should be offered in all of the colleges but certain specialized programs, especially expensive ones with limited enrollments, should be offered only at one or two selected campuses. These selected campuses, inasmuch as their programs are meeting a statewide rather than a local demand, may in time add dormitories in order to facilitate attendance by students from other islands. (Some community colleges on the mainland are presently considering the addition of dormitory facilities.)

Community College Advisory Committee -- Although this statewide system reflects the political tradition of the Islands and may contribute to economy and efficiency, the community colleges, wherever they are established, must become institutions which serve their local communities. Community colleges, particularly those located outside urban Honolulu, can and should become integral parts of the social and cultural life of their communities.

In order to enhance the local feature of the community college, each institution should have a local advisory committee, representative of the locality, which meets frequently with the administrators of the institution to discuss the activities and the development of the local campus. The committee should also be in communication with the governing board of the system and should make recommendations when consulted. In view of the advisory nature of the committee, its members should be appointed by the governing board. There should be seven members on the committee.

University Relationship

It is recommended that, for administrative purposes, the community college system be placed under the Board of Regents of the University of Hawaii. Given the size of Hawaii, her existing governmental and educational organization, and the fact that the University of Hawaii is the only public and by far the largest institution of higher learning in the State, this arrangement is believed to be best for Hawaii.

The direction and supervision of community colleges are a major responsibility. Since close coordination and partnership with the University are necessary to realize the benefits of higher education throughout the State, the person in charge of community colleges should be responsible directly to the President of the University. This status and relationship will also permit the community college system to function more independently, as a full partner of the University, in meeting staff and curriculum needs.

It must be clearly recognized that a community college system introduces a new type of higher education and that its distinctive programs call for appropriate rules and regulations. The regular University rules governing faculty, promotions,

admissions, and curriculum may be used as guides for, and not automatically adopted by, community colleges as they attempt to establish regulations appropriate to their ends.

What can be gained from placing the system under the University Regents is a well-coordinated plan of higher education which will benefit the entire State. The general purpose is to attain maximum educational benefits at minimum costs. Coordination on the level of the college parallel programs, especially for transfer to the main campus of the University which is expected to be the usual pattern, should be nearly perfect. Without undue interference, the University's academic departments may be able to aid in the staffing of the community colleges by training able teachers or otherwise assisting in the recruiting of faculty members, realizing that there may be a difference of emphasis in the characteristics desired of a community college instructor as compared to a University faculty member.

The whole state may benefit from the University's utilization of the community college facilities, especially on the neighbor islands, for certain types of programs. Major University theatre productions and lectures can be regularly scheduled at community college centers. At night, alongside the strong evening programs which the community colleges are expected to sponsor, the University's College of General Studies can schedule classes for upper division and graduate credit. The University's summer session office might consider the possibility of decentralizing its activities, especially to the neighbor island community colleges. Summer sessions on the neighbor islands should be attractive for University professors, and the clientele for the regular classes will largely be school teachers who reside on the island and undergraduates, no matter where they are regularly enrolled, who return to spend the summer at home. There is also the possibility of utilizing the facilities of a community college to sponsor special summer programs or workshops in particular subject areas, such as in Modern Art or Oriental Music, with the hope of attracting specialists, both teachers and students, from all parts of the mainland for intensive work under rather intimate surroundings.

Although this recommendation seemingly has the advantage of better coordination of all higher education efforts within the State, many critics of this plan claim a rather serious disadvantage, i.e., that the inability or unwillingness on the part of the four-year institutions to appreciate the distinctive role of the community college will prevent the institution from developing its full potential. The principal manifestation of this inability would be the overemphasis on the collegiate academic program and the neglect of the technical and other programs which are essential functions of the community college.

Some universities in the past opposed the development of junior colleges because they assumed they would be competitors for funds and for students, offering, in turn, limited programs of low quality. Today, more universities are looking upon junior colleges as complementary institutions in meeting the growing and varying demands for higher education. Indeed, the danger may be that the universities are primarily interested in junior colleges only as they enable the

universities to concentrate on upper division and graduate studies, thus assigning a truly "junior" role to community colleges.

Even with the possibility of these potential dangers in mind--and they should always be guarded against--it is recommended that Hawaii's community college system, for administrative purposes, be placed under the supervision of the University Board of Regents with proper safeguards so that the purposes of the community college can be achieved.

There are two other alternatives for the administering of the statewide community college system. They are: (a) supervision by the State Board of Education; and (b) supervision by a newly created independent board for community colleges. After discussing each of these two alternatives, data on the patterns in other states are presented.

Alternative 1: Supervision by the State Board of Education -- The community college system in Hawaii could be placed under the supervision of the Board of Education, in line with the recommendation of the Odell Report. It can be argued that this is the pattern which has worked successfully in several states, among them California and Florida which have outstanding community college systems.

One obvious advantage of supervision by boards of education on the mainland is the greater opportunity for local control of community colleges in most of the states where independent school districts exist. Hawaii, however, has no independent school districts. Therefore, placing community colleges under the Board of Education, under the present organization, will not necessarily enhance local control of these institutions.

Where community colleges are placed under state boards of education, financial support is generally provided in the same manner as for elementary and secondary schools, with major dependence upon local property taxes. Hawaii's pattern for financing public education, elementary and secondary, as well as higher education, does not follow mainland practice. Hawaii principally relies on state revenues.

Some of the major reasons for community colleges being under state boards of education on the mainland may not apply to Hawaii, but this does not mean that a successful community college system cannot be administered in Hawaii under the Board of Education. If the community college system is to be placed under the Board of Education, two conditions are essential:

1. That the administering agency in the Department of Education be given a great deal of autonomy. This independence initially requires an adequate professional staff headed by a director who reports directly to the superintendent.
2. That this administering agency establish and maintain the community colleges as institutions of higher education, for "the educational program appropriate for students as they approach the maturity of adulthood must depart substantially from those appropriate for the students of less mature years who are involved in elementary and secondary schooling."²

Alternative 2: Supervision by an Independent State Board for Community Colleges -- Another plan would place the community college system under a State

Board for Community Colleges. Members of the Board could be selected in the same manner as either the Board of Regents or the Board of Education.

Most of the laws creating independent state boards for junior colleges on the mainland were enacted rather recently (Massachusetts, 1958; Arizona, 1960; Minnesota, 1963), but the number remains small. However, three compelling reasons seem to support this arrangement: (a) the growing importance of the junior college in public education and a realization of its distinct role; (b) the growing state support for these institutions; and (c) the recognition that they should be organized according to an orderly and efficient plan that will assure maximum statewide benefit to students.

The major advantage of the independent junior college state board appears to be that it can concentrate on and can more readily develop the distinctive role of the community colleges. As the primary if not the exclusive responsibility of the board, community colleges will be given the attention and encouragement that they require. They will not be the "step child" of a Board of Education whose primary responsibility is with the secondary and primary schools, nor will they play "second fiddle" to the four-year campuses under a board governing universities.

Major disadvantages include the confusion that might result from the creation of a third state board to supervise educational matters; the limited ability of a new board, without historical prestige, to compete politically with other educational boards for legislative attention and funds; and the increased difficulty of achieving statewide coordination of educational efforts.

Experience with the independent board is too recent to furnish data on the actual effectiveness of this plan. In the long run, this may prove to be the desirable form of state supervision.

For Hawaii, at this time, with its strong tradition of state centralization and its lack of experience with junior colleges, this pattern of supervision is not recommended. Periodic review of the effectiveness of the recommended pattern would make it possible to introduce a different pattern if that seemed wise, as growth in enrollments and experience in the system bring new problems and new insights.

Supervisory Patterns in Other States -- A recent study of state administrative supervision and coordination of public junior colleges reports a great diversity in patterns of responsibility at the state level. Although "the predominant pattern of general legislation is to include the public junior college as an integral part of the over-all state system of post-high school education," it is "less clear . . . whether the junior college in the law is viewed as part of the system of public secondary or public higher education."³

In 1963 there were 38 states with state laws on junior colleges. An examination of their legislation, as presented in the report, reveals the following as the state agency responsible for supervision and coordination of junior colleges:

- 16 states: State Board of Education
- 5 states: State Department or Superintendent of Education
- 5 states: State Board of Higher Education
- 2 states: Board of Four-Year State University
- 3 states: Separate State Junior College Board or Commission
- 7 states: A combination of two boards

The study of state supervision observes that there is great diversity in more recent legislation and concludes that "the long-range character and pattern for administration of public junior colleges at the state level is still to be determined."

Conversion of Technical Schools into Community Colleges

It is recommended that the public technical schools be converted into community colleges by making the necessary legal amendments to transfer the technical schools to the University of Hawaii and to prepare schools for their community college role by making curriculum changes, hiring instructors as necessary, establishing adequate library facilities and guidance services, and constructing additional buildings. Present faculty members in the technical schools should be retained. Funds in the budget should be allocated during the initial period for the purpose of providing the present technical school staff with the opportunity for professional improvement, if they so desire. During the transition period, an organized orientation program on the purposes and character of community colleges is extremely valuable.

This recommendation in no way detracts from the important role played by Hawaii's five public Technical Schools in meeting the demands for post-high school education as discussed at some length in Chapter II. Rather it is hoped that the further development of technical education will be given an impetus by being a part of a community college, while the technical phase at the same time serves the college in fulfilling its broad objectives.

The obvious difficulties in this recommended plan are : (a) transfer of the technical schools to the University involves personnel shifts, and a readjustment orientation and administrative organization may be necessary at both the University of Hawaii and the Department of Education; (b) conversion of the individual technical schools into community colleges may be more difficult than starting completely anew because staff, curriculum, and building changes may be necessary.

What might be gained, however, is the kind of post-secondary educational opportunity that seems most suitable for both Hawaii's youth and Hawaii's economy. A comprehensive program, including both technical and liberal arts programs, of the community college: (a) enriches both curriculums and enables students to learn in a richer environment, (b) gives uncertain students (our survey indicated decision about occupational goals as one of the major reasons for uncertainty about continuing education) the setting for reaching a decision on, and acquiring

appropriate education in preparation for an occupation, (c) encourages a wider variety of high school seniors to contemplate and probably undertake schooling beyond high school, and (d) provides the type of training that modern technology demands.

At least two other alternatives to the above recommended plan exist.

Alternative 1: Strengthen the Technical School System -- This could be done effectively by amending the state law to authorize the Department of Education to engage in courses of instruction with collegiate credit. Technical Schools will thus be able to add new programs on the collegiate level. It appears, however, that the problem is not so much in the law as in the attitudes of two groups directly affected: (a) Will the Department of Education be able and willing to assume this additional responsibility? The experience of other states indicates that this responsibility can be assumed by boards of education and with a great deal of effectiveness. At a minimum, this alternative will call for administrative reorganization so as to give the department or division in charge of technical schools greater autonomy and flexibility within the Department of Education. (b) What are the prevailing attitudes of high school graduates toward technical education? In Hawaii, as in the rest of the nation, technical training does not seem to have the prestige and the image that it rightfully deserves; many of the occupations for which technical training is provided do not appear to have status in the eyes of our youth. Partly to combat this unfortunate stigma, the names of the schools were changed from "vocational" to "technical." But a great deal of sentiment still exists in our society, not only among our youth, that technical training is somehow inferior to purely academic, i.e., collegiate training. By changing our Technical Schools to Technical Colleges, more than a change of name will be involved, but the change of name itself may be rather significant.

Alternative 2: Divide Responsibility for Technical Education Between Technical Schools and Community Colleges -- The second alternative to the conversion of technical schools into community colleges is to maintain the present Technical School System and assign collegiate-type programs to community colleges which will be created. This essentially is the recommendation of the Joint Committee of the Board of Education and Board of Regents which was formed to study the HEW recommendation on community colleges. The statement of the Joint Committee, dated April 10, 1963, reads in part:

The Joint Committee believes that new facilities should be developed for these two-year branches of the University, and that the present technical schools should remain a part of the Department of Education. Present programs in the technical schools which are determined to be more logically University and community college offerings should be transferred as soon as possible to the two-year branches of the University.

In order to make clear the division of responsibility between the Department of Education and the University of Hawaii, it is agreed that the latter will have jurisdiction over all public educational programs to which either graduation from a secondary school or its equivalent is required for admission and which culminate in a collegiate degree.

It is possible that a division of responsibility for technical training can be developed. The division between collegiate level technical training and other types of technical training may be helpful and, in some cases, this division seems readily obvious, such as electronics as against auto body and fender repair. But there are several types of technical training which cannot be so easily categorized and the classification seems to be largely dependent upon the nature or the depth and breadth of the training one wishes to prescribe for a given technical field. For example, auto mechanics can be taught in a practical "nuts and bolts" fashion, or it can be taught through a curriculum which requires a good foundation in mathematics and science. Most of the courses in business administration can also be taught with varying degrees of sophistication.

In addition, there is the complication that there may be levels of training and competence in a given field or related fields, e.g., dental assistant and dental hygienist. A division of responsibility may require costly duplication of facilities. A division is also made difficult by the rapid changes in technology that can bring immediate obsolescence to one occupation and swiftly increase the depth and complexity of preparation for another.

Another serious disadvantage of this alternative is that it may lead to the parallel development of two increasingly similar systems for post-high school education. The recent experience of North Carolina serves as a case in point.⁴ North Carolina earlier authorized the development of two types of post-high school institutions: community colleges and industrial education centers. The former tended to emphasize college parallel programs and were under the direction of the State Board of Higher Education; the latter concentrated on the training of technicians and skilled craftsmen and were under the State Board of Education. A few years of experience seemed to have indicated that this arrangement was not the most effective and efficient in meeting post-high school education needs. The Governor's Commission on Education Beyond the High School re-evaluated North Carolina's dual system and reported in 1962 as follows:

We believe that the industrial education centers and the community colleges will tend to become more alike than unlike; that the perpetuation of two increasingly similar but separate systems of post-high school institutions of two-year grade cannot be justified either on educational or on economic grounds; and that state-level supervision of the two systems by different agencies will lead to undesirable competition, lack of effectiveness and efficiency, and economic waste. We recommend that the State develop one system of public two-year post-high school institutions offering college parallel, technical-vocational-terminal, and adult education instruction tailored to area needs; and that the comprehensive community college be subject to state-level supervision by one agency.⁵

The General Assembly of North Carolina incorporated this recommendation into its 1963 Higher Education Act, and North Carolina now has embarked upon a program of comprehensive community colleges under the State Board of Education.⁶

Curriculum

It is recommended that Hawaii's community colleges be comprehensive in nature. Basic courses in the following programs should be offered:

1. College parallel or transfer programs. These include courses, largely in the liberal arts, which may be taken to fulfill the freshman and sophomore requirements of a four-year college. These programs will probably resemble those at the University of Hawaii since it is anticipated that the majority of the transfer students will go to the University. However, the community colleges should be encouraged to experiment with and initiate new programs and courses which will contribute to a sound foundation in the liberal arts.

2. Technical and vocational programs. These programs will prepare students to work as technicians and at a semi-professional level in such fields as engineering, business administration, and nursing.

Initially, this phase of the curriculum can be developed out of programs now offered at the Technical Schools. Modifications of the existing programs will be necessary. The principal change is the addition of general education courses. For example, an examination of the accounting curriculum at a technical school in Hawaii with that of a community college in California discloses the following patterns:

	<u>Number of Credits</u>	
	<u>Hawaii</u>	<u>California</u>
Specialized courses	51 (80.2%)	41 (56.2%)
Elective or related courses	5 (7.3%)	6 (8.2%)
General education courses	<u>8</u> (12.5%)	<u>26</u> (35.6%)
Total credits	64	73

The most striking difference in the comparison is found in the proportion devoted to specialized courses and to general education courses. A core of basic general education courses is desirable in the curriculums of the community colleges.

New programs in technical and semi-professional training should gradually be added; their specific nature can best be determined after a careful study has been made of employment trends and changes in the State's industrial and business patterns.

Training in the technical fields must be kept up-to-date; it is recommended that each community college appoint a panel of community members to provide advice on curriculums most appropriate to each field. The Technical Schools now have such groups furnishing this kind of assistance.

3. Continuing and general education programs. Courses in these programs do not vary markedly from courses in the transfer and technical programs. However, these programs are distinguished by the fact that they are more readily available

to adults, usually by being offered in the evenings. They can be taken by those who wish to be retrained, to continue interrupted collegiate careers, or to gain specific types of technical knowledge. Courses at the community colleges can also be taken for general education purposes by those who seek a better understanding of history, culture, science, and contemporary events.

Although each of Hawaii's community colleges should have a comprehensive educational program, this does not mean that the same courses should be scheduled on each campus. Each college will provide basic courses in all three programs mentioned above; beyond this, curriculum development will depend upon the educational needs of the communities, counterbalanced by the availability of funds.

It should be borne in mind that community colleges offer a wide range of curriculums; a recent listing of junior college offerings specifies over a hundred programs.⁷

The activities of community colleges should not be restricted by tradition or the practices at four-year colleges, but should be guided by the principle of meeting the legitimate educational demands of students and communities.

Admissions and Academic Standards

It is recommended that the community colleges in Hawaii develop liberal admissions policies, so that as many students as possible, who might profit from further schooling, will be admitted. This means that opportunity should be given for students to succeed or fail by their own efforts, not solely by a predetermination based on high school records or standardized test scores. The admission standards of the University of Hawaii should not apply, even for the college parallel programs. This does not mean that everyone should be allowed to enroll in the college transfer curriculum. It does mean that different programs may have different criteria for admissions and that guidance services should be available to assist students in making their choices. Thus, various aptitude and other examinations should be administered and used by the community colleges, not primarily to determine whether one is admitted or not but rather, given after admission, to help students determine suitable programs of training.

Liberal admission policies are recommended chiefly because enough students are "late bloomers"--they oftentimes do not fully utilize their abilities in high schools and thus perform poorly, but, as they mature, their talents are used. Furthermore, the experiences of many community colleges on the mainland indicate that students who were not acceptable to the four-year institution, are admitted, undertake the collegiate programs, transfer to four-year institutions, and graduate with baccalaureate degrees. However, there is disagreement among community college administrators as to whether all who apply should be admitted to their colleges. A defense of the open door policy is stated thus:

We hear increasingly about the evils of the open-door policy in junior colleges. There are many who believe that selective admission standards should be established. Even if we admit that many students entering junior colleges are marginal in their ability to earn a baccalaureate degree, we

still must answer the question of what is best for high school students as they emerge in a period of increasing social and occupational complexity. We can be reasonably sure that if an institution such as the junior college does not serve them, the public will insist that some other agency be created to give them the necessary transitional experience from school to active participation in normal adult activities. Assuming we close the door slightly, how do we know how far to close it before the college will cease to exert its maximum activating influence in its community?⁸

The question of admissions is related to the issue of standards of achievement. There exists the fear that liberal admission practices mean the lowering of standards. Lowering of academic standards is not recommended. "High standards of achievement can be combined with a liberal admission policy if breadth of curriculum, competent guidance, and a concern for good teaching are included in the total educational offering."⁹ As noted earlier in Chapter IV, the maintenance of quality is to be valued, but with it goes the responsibility to provide students with the necessary services, teachers, and curriculum to enable the development of abilities.

Tuition

At the present time, the tuition at the University of Hawaii for all students is \$170 per year and there are no tuition charges at the Technical Schools, although fee charges average about \$40 annually. In our survey, 73 per cent of those who said that they would attend a public two-year college indicated that they could afford to pay at least \$100 per year for tuition.¹⁰ Ideally, the community colleges should be tuition free.¹¹ In view of the State's economy and the additional costs that the establishment of community colleges will require, it is recommended that the initial tuition rates at the community colleges be set at \$130 per year and that, as a general rule, the tuition at the community colleges should not exceed 80 per cent of that at the University of Hawaii. This differential is recommended because (a) the previous technical school programs were tuition free and (b) mainland experience shows that the cost of undergraduate instruction at large community colleges is generally lower than that at four-year institutions. Furthermore, if non-resident tuition is established for the University of Hawaii, the community college system should likewise adopt out-of-state tuition in proportion to the general rule mentioned earlier.

Traditionally, public community college costs on the mainland have been met in large part from taxes, and an attempt is made to keep tuition and fees to a minimum. Few states have managed to provide tuition-free community colleges. A 1961-62 survey of the fee structure for 227 public junior colleges reported that the median for in-district students was \$121 and for out-of-district students, \$245.¹²

Scholarship programs should be established at all community colleges in Hawaii, and awards should be made to students majoring in different curriculums. Campus employment opportunities and services for securing part-time work should be provided the students.

Community College Plans for Each District

Before describing the recommended plan for each of several districts in the State, criteria to guide and govern the establishment of community colleges in Hawaii must be carefully determined.

Criteria for Establishment of Community Colleges

There are various state laws and regulations which stipulate, in general or specific terms, prerequisites for the founding of two-year colleges. A recent comprehensive survey of criteria applied in the different states concludes: "There can be no one valid set of criteria for the establishment of 2-year colleges. The most important criterion is a requirement of a study of the area and constituency to be served by the proposed college. . . . In the conducting of the study, four other criteria can be examined: potential enrollment, financial support, community interest, and the educational needs of students likely to enroll in the institution."¹³

The following criteria are recommended for Hawaii to aid it in determining where and when community colleges should be established. However, these criteria should be used as general guides, not absolute standards, for each of the districts, while similar in many ways, differs from the others in some respects. In view of the statewide organization of Hawaii's system, a criterion on the financial ability of districts is not included, for state resources are expected to furnish most of the necessary funds.

1. Survey of Educational Needs. A survey of the district should be conducted to determine the educational needs of post-high school youth. Surveys of existing post-secondary institutions, high school seniors and graduates, and a community's economy help to define the nature of educational needs in a district. Periodically statewide studies should also be conducted in view of the statewide organization of the system. Earlier general surveys of educational needs, the HEW study of higher education in 1961, and this project meet the general requirements of this criterion. However, more localized and detailed surveys are helpful in determining curriculum needs.

2. Enrollment. For Hawaii's statewide system, it is recommended that the enrollment minimum be 400 with the proviso that some leeway be provided for neighbor island institutions. This would enable the college to offer the basic courses required for a comprehensive curriculum. A study of mainland practice shows that there is a variation in the minimum potential enrollment specified in state laws and regulations or deemed desirable by professional educators. The range usually is from 200 to 400 plus.

3. Community Interest and Support. This is a difficult criterion to apply since community interest is an intangible factor. Nonetheless it is important to assess community understanding and attitudes about community colleges and their functions. Since a favorable community sentiment is basic to success and in view

of the need for local expression, especially in a statewide system, it is recommended that special efforts be made to disseminate information about, and to stimulate public discussion on, community colleges.

City of Honolulu

With approximately 50 per cent of the State's high school seniors residing within the city of Honolulu, the needs for further educational opportunities and the potentialities of developing good community college facilities are present. Despite the fact that the University of Hawaii and two of the largest Technical Schools are located centrally in this area, it is to be noted that 827 or 18 per cent of high school seniors in Honolulu indicated that they would attend a public two-year college should one be located within the city. An additional 2,250 or 48 per cent indicated that they might enroll at such an institution. The Fall 1963 enrollment at the Honolulu Technical School was 613, at Kapiolani Technical School, 512.

Honolulu is also the business and governmental center of the State. Not only in terms of population but also in terms of technical facilities, the community colleges located in Honolulu would be the most appropriate to handle the widest variety of general, and also the more specialized programs.

It is recommended that two community colleges be established in Honolulu:

1. By converting the present Honolulu Technical School so that it becomes the State's community college with a strong emphasis on technical and vocational programs, such as in engineering and electronics. As suggested by the HEW report, Los Angeles Trade-Technical College may serve as a model. The conversion will initially require staff and additional classroom, laboratory, and office space for a liberal arts program, and a library. The present site is small and steps should be taken to assign the surrounding State lands to the college. Even then, the campus will be crowded and multi-story structures will eventually be necessary.

2. By converting Kapiolani Technical School to a community college. This will require the addition of staff and classroom-laboratory space for a liberal arts program. This college can be the initiator of programs in nursing, dental hygiene, and data processing, and later in such fields as police science and hotel management. The present campus of only five acres is far too limited. Despite the fact that a new, air-conditioned building for the business administration program has just been completed, serious consideration should be given to moving the campus to a larger site within the city. The property around the Ala Wai Boathouse, where a portion of Kapiolani Technical School's program is now located, would make an attractive college site, although other alternatives may exist.

Leeward Oahu

This is the second largest area in terms of population and, in recent years, has shown the greatest rate of growth. Its development potential for the near future is recognized by planners and businessmen. The area at present has no

higher education facility and, despite its proximity to Honolulu, congested traffic patterns do not give residents of the area easy accessibility to the city. The high school seniors of this area, where there are no private secondary schools, were especially favorable in their response to the possibility of enrolling at a community college: 365 or 24 per cent said they would and 788 or 52 per cent said they might enroll at such an institution. Spearheaded by the Leeward Economic Planning Board, a number of community organization leaders have evidenced an interest in locating a college in the district. It has also been indicated that military personnel and their dependents, who are largely concentrated in this area, would take advantage of the proximity of such a college.

It is recommended that a community college be established in this area on a site preferably near Waipahu. Curriculum offerings should be determined after a more intensive survey of the area is made.

Windward Oahu

Of the seniors in this area, 210 or 23 per cent indicated they would attend a public two-year college; 472 or 52 per cent said they might. The heavily concentrated suburban area of Kailua-Kaneohe can probably supply an enrollment to meet the minimum of 400 students. However, the establishment of a community college during the next few years is not recommended for the following reasons: (a) accessibility to facilities in the city of Honolulu is good for residents of Kailua and Kaneohe who can utilize the Pali and Likelike highways; and (b) this area now has a private college (Church College at Laie) offering associate degree and certificate programs, and plans are now underway to locate a private liberal arts college (Christian College of the Pacific) in a strategic spot between Kailua and Kaneohe. It should be recognized that these private institutions only partially meet the needs that are generally met by community colleges. The area should be surveyed from time to time to determine the feasibility of locating a community college in the Kailua-Kaneohe area.

Hawaii

Hilo already has a branch campus of the University of Hawaii with an enrollment of 355 and a Technical School with an enrollment of 309. Sentiment is strong in Hilo to foster the growth of the Hilo Campus so that it may become a four-year college. Interestingly enough, Hawaii was the neighbor island whose seniors registered the most favorable attitude toward a community college: 256 or 24 per cent of high school seniors said that they would and 510 or 47 per cent said that they might attend a community college on that island.

It is recommended that the Hilo Campus and the Technical School be merged administratively and be designated a community college. The existing facilities at the University's Hilo Campus and at the Technical School, and their relative proximity, plus the indicated interest of the present seniors, may make it possible for the community college to begin to receive its first students in the Fall of 1965.

The converting of the Hilo Campus to a community college does not preclude the possibility that in the future it may become the second four-year college campus, if and when the need for such a campus in the State becomes evident. Should this circumstance occur, the present site of the Hilo Campus could become the center of the four-year college and the present location of the Technical School the center of the community college.

Maui

Great community interest for the establishment of a two-year college was evident on the island of Maui. Several public meetings on this subject were held, the County Board of Supervisors passed a resolution endorsing the establishment of a community college, and several civic and P.T.A. organizations adopted favorable resolutions.

This interest was not reflected in the responses of the high school seniors on the island¹⁴; 106 or 16 per cent indicated that they would and 321 or 50 per cent indicated that they might enroll at a community college on Maui. Maui Technical School reported a Fall 1963 enrollment of 215. Maunaolu College, a private junior college located at Makawao, reports an enrollment of 184 of whom 92 are believed to be residents of Maui. Enrollment predictions, based on customary formulas and our survey, for a community college on Maui are over the minimum of 400.¹⁵

An advantage for the location of a college on Maui is the fact that her population is largely concentrated in the Wailuku-Kahului area. Furthermore, it is believed that the citizens of Maui will participate in and support the co-curricular activities of the campus.

It is recommended that the Maui Technical School be converted to a community college. The immediate need is for a staff in the liberal arts program and a classroom-library building. It is further recommended that the administration and staff of Maunaolu College be kept informed of the plans for establishing this community college.

Kauai

Seniors on Kauai, with the smallest population of all the districts, showed the least enthusiasm for a community college. Only 70 or 16 per cent indicated they would and 193 or 43 per cent indicated that they might enroll at a community college. Using a criterion of a minimum enrollment of 200, Ihara's 1958-59 survey on Kauai concluded that a community college was feasible on Kauai. A Department of Education survey during the 1962-63 school year indicates that, of the seniors and juniors who plan to attend a "college or junior college," 175 would and 238 would not enroll in a Kauai Community College.¹⁶

Despite the fact that some of Kauai's legislative leaders are keenly interested in locating a community college on the island and the local newspaper has carried a number of articles about junior colleges, there seems to be no widespread interest in junior colleges among seniors. This does not mean that the

residents of Kauai are not interested in post-secondary education. On the contrary, past surveys of the plans of high school graduates indicate that Kauai consistently has had the highest percentage planning to go to college and relatively large numbers going to the mainland for schooling.

It is recommended that Kauai Technical School, with a present enrollment of 159, be placed under the statewide community college system for administrative purposes, but that it retain its present designation. Its curriculum should be studied for possible revision. Discussions should be held with the political and business leaders of Kauai and student needs resurveyed with the possibility that in time the Technical School may serve the island more effectively as a community college.

Timetable

Since community colleges are new to Hawaii, new administrative organizations and college campuses will come into being. Lead time is necessary for the effective planning and implementation of the system. Some of the tasks which will have to be performed before campuses can be readied to receive their first students are discussed in the last section of this report.

It is recommended that the community college campus openings be scheduled as follows:

Fall 1965

1. Hilo. The nuclei for both the basic technical programs and the academic programs are now present in Hilo. A year's lead time is necessary to work out the adjustments in procedures and curriculums. Additional staff members will also have to be recruited.

2. Kapiolani (in Honolulu). The major initial tasks will be the addition of staff for a basic college parallel program, the reorganization of curriculum, and the preparation of adequate library facilities. Temporary buildings may be necessary while plans are explored to relocate this campus to a larger site.

Fall 1966

3. Maui. Planning should proceed immediately for the acquisition of additional lands and the construction of classroom, laboratory, and library facilities. These may be constructed in time to receive students in the Fall of 1966. Curriculum needs and employment opportunities on the island should be surveyed.

4. Honolulu. Expansion of and changes in technical training programs should be planned. Additional lands should be acquired and new classroom, laboratory, and library facilities constructed for occupancy in the Fall of 1966.

Fall 1967

5. Leeward Oahu. An entirely new campus is envisioned for this area. Planning must begin immediately for site selection and campus design, and determination must be made of appropriate programs of study for this campus.

Ongoing Activities

Consideration of campuses on Kauai and in Windward Oahu should continue. Local advisory committees should be appointed for these districts to help in this task. Plans, as they are formulated, will be presented at future sessions of the Legislature.

Financing

Hawaii's statewide community college system should be financed by the state government through general appropriations, in the same manner as are the University of Hawaii and, in large measure, the public schools.¹⁷ The system, therefore, relies upon the State's total financial resources and not primarily upon a district's total assessed valuation of property. The problem of adequate financial support for the colleges remains; requests for funds must be made realistically and clearly to the State Legislature.

Establishing a community college system will involve additional funds for education. Generally, the costs per student at large community colleges are below those at four-year institutions. It is problematical that this will be true in Hawaii where community colleges may not have large enrollments. The total costs for education in the State will rise with the development of community colleges. In the long run, this increase in expenditures must and can be defended on the basis that educational opportunity has been extended and expanded by the community college system. Community colleges should not be looked upon as partial substitutes for the expected expansion of University programs. The establishment of these colleges should not detract from support of the University.

Financial support for community colleges should be sought from many sources. Exploration should be made of possible ways in which county government support can be given. Local citizens and organizations should be encouraged to participate in the development of the college campuses through donations of land and equipment as well as through contributions for scholarship and other programs. The possibility that certain programs and activities may receive aid from private foundations should be explored.

If a community college system is authorized in Hawaii, funds for capital improvements are available under the Higher Education Facilities Act of 1963. On a 40 per cent federal and 60 per cent state matching basis, it is estimated that Hawaii can expect ^{24,752} \$206,834 annually under this Act for the next three years. Under the Vocational Education Act of 1963, which includes major amendments to the existing federal aid program for vocational education, community colleges qualify for funds for certain programs.

Summary of Recommendations

It is recommended that:

1. A statewide community college system be established in Hawaii.
2. The community college system be placed, for administrative purposes, under the Board of Regents of the University of Hawaii. The director of the statewide system shall be responsible directly to the President of the University.
3. The Technical Schools be (a) transferred from the Department of Education to the University of Hawaii and (b) converted into community colleges.
4. A community college advisory committee be appointed in each of the following districts: Honolulu, Leeward Oahu, Windward Oahu, Hawaii County, Kauai County, and Maui County.
5. The curriculums of the community colleges be comprehensive; i.e., that programs be offered in (a) college transfer, (b) technical-vocational education, and (c) continuing and general education.
6. The community colleges maintain a liberal admissions policy.
7. The community colleges provide adequate counseling and guidance services.
8. The tuition rate at the community colleges be no more than 80 per cent of that of the University of Hawaii.
9. A minimum potential enrollment of 400 students be one of the criteria in considering the establishment of community colleges.
10. Community college campuses be established in the following order:
 - Fall 1965: Hilo, with the facilities of the University Hilo Campus and the Hawaii Technical School.

Honolulu, with the conversion of Kapiolani Technical School.
 - Fall 1966: Maui, with the conversion of Maui Technical School.

Honolulu, with the conversion of Honolulu Technical School.
 - Fall 1967: Leeward Oahu, with the establishment of a new campus.
11. The feasibility of establishing campuses on Kauai and in Windward Oahu be the subject of further study.
12. The establishment of a community college system be authorized by the State Legislature during the 1964 session and that detailed planning commence immediately.

Implementation of the Proposed Plan

Implementation of the proposed plan for a statewide community college system requires the following:

1. Legal authorization by the State Legislature establishing a community college system. The law in general terms should specify the major purposes of the community colleges and designate the Board of Regents of the University of Hawaii as the governing board. A draft of such a bill, along with cost estimates for the proposal in general, will be presented in a supplementary memorandum.

The State Legislature may choose not to adopt the major outlines or the details of the recommendation contained in this report. However, the Legislature during the 1964 session should reach a basic decision on whether community or junior colleges will be established in the State of Hawaii. Not only should the needs for educational opportunities be met as soon and as effectively as possible, but it must be recognized that time-consuming detailed planning must precede the opening of any new campus.

2. Transfer of the technical schools from the Department of Education to the University of Hawaii. Although the first community college campuses are scheduled to receive their first students in the Fall of 1965, the administration of present technical schools should be transferred from the Department of Education to the University of Hawaii, effective July 1, 1964. The character and operations of the technical schools will not be altered for the 1964-65 school year, but their early transfer is necessary so that all members of the present staffs of the technical schools can participate fully in planning the projected conversion. The law should contain safeguards so that the employment and other related rights and perquisites of the present personnel of the technical schools are not adversely affected.

3. Budget appropriations for the 1964-65 academic year to support the following activities so that effective planning can begin immediately:

- a. The appointment of a central staff to direct and implement the plan. The core of this staff should consist of a director and two professional associates, both to coordinate their efforts but one to be primarily responsible for the planning of the curriculums and for the staffing of the technical and semi-professional programs, the other for the college parallel programs. The necessary secretarial, clerical, equipment, and other operating expenses should also be provided.

- b. The appointment of certain staff members of the community colleges at least six months in advance of campus openings. To plan and prepare the campuses to effect new curriculums and to enroll their students, key administrators for the individual campuses should be appointed in advance of the opening dates: (1) a director of the campus to supervise and implement the necessary organizational plans; (2) a dean of students to organize the admissions, testing, registration, record-keeping, and counseling services; (3) a business manager to oversee finances, keep the books, and to purchase

necessary equipment and supplies; and (4) a librarian to organize and place orders for the library.

c. The hiring of the services of a planner. To meet the schedule of campuses proposed in the timetable, physical planning for all of the campuses--involving selection of sites, designing and modifying campuses and buildings, estimating land acquisitions and building costs--must begin as soon as possible.

d. The planning, constructing, and equipping of campuses and buildings. Additional sites and buildings will be necessary on all campuses. With the timetable as a general guide, appropriations should be made for sites and new buildings at the campuses expected to open in the Fall of 1965. Funds should also be provided for the purchase of books for the library as well as for other equipment.

e. The orientation and training of staff members. Inasmuch as the community colleges will be a new educational venture for the Islands, funds should be allocated to sponsor workshops for the purpose of acquainting all staff members with the scope, character, and functions of community colleges. An appropriation should also be made to subsidize any additional professional training which incumbent staff members of the technical schools need to undertake.

As the system develops, needs and programs should be evaluated constantly. Surveys should be made periodically to define the needs of students, of industry, and of the community. The effectiveness of all campus programs should be studied from time to time. Of primary importance, and a major responsibility of the central staff, are a realistic evaluation of all aspects of the plan proposed in this report and the formulation of revisions which may be necessary in the light of experience.

In the final analysis, the success of Hawaii's community colleges will depend to a great degree on the understanding and appreciation of and dedication to the purposes of these colleges on the part of Hawaii's citizens. The administrators of the system have a major responsibility in seeking public understanding of an educational enterprise which is comparatively new to Hawaii. Furthermore, this understanding can be fostered by the teachers in the community colleges, perhaps more than any other single group, as they perform their tasks well. The citizens of this State can be expected to support these institutions as they effectively increase educational opportunities and thereby enrich the lives of the people of Hawaii.

(Miss Helen Domai prepared the manuscript for printing and Lee Ables did the illustrations.)

FOOTNOTES

Chapter II

1. University of Hawaii, Academic Master Plan Committee, "Preliminary Draft of the Report of Academic Master Plan Committee of the University of Hawaii," Second Draft (November 1963), p. 17. (Mimeographed.)
2. U. S. Office of Education, The University of Hawaii and Higher Education in Hawaii (Report of a Survey), by S. V. Martorana, Ernest V. Hollis, and Staff Members of the Division of Higher Education (Honolulu: Department of Budget and Review, November 1962), pp. 266-67.
3. Part of the increase may also be due to a change in the basis for reporting "first-time" enrollments to include evening students as well as the regular daytime students.
4. U. S. Office of Education, University of Hawaii, p. 34.
5. Ibid., p. 70.
6. University of Hawaii, Report of the Study and Development Commission (Honolulu: November 1960), p. 153. (Mimeographed.)
7. Stanley E. Swarder, "Report on Public School Adult Education in Hawaii" (May 11, 1962), p. 2. (Mimeographed.)
8. Ibid., p. 3.
9. University of Hawaii, "Preliminary Academic Master Plan," p. 106.
10. Ibid., p. 107.
11. University of Hawaii, College of General Studies, "Report of College of General Studies to University of Hawaii Master Plan Committee" (August 1963), p. 19.
12. Thomas K. Hitch, The Hawaiian Economy in Perspective (Honolulu: First National Bank of Hawaii, 1962), p. 6.
13. Robert Ferber and Kyohei Sasaki, The Projected Economic Growth of the State of Hawaii to 1970 (Honolulu: University of Hawaii, Bureau of Business Research, 1963), p. 1.
14. Joint Committee on Guidance and Employment of Youth, Hawaii's 1960 High School Graduates, Ninth Annual Report on the Plans of Hawaii's High School Graduates with Emphasis on Educational Plans (February 1961), p. 9.
15. U. S. Department of Labor, Manpower; Challenge of the 1960s (Washington, D. C.: Government Printing Office, 1960), p. 11.
16. Bank of Hawaii, Hawaii: Patterns of Island Growth: 1958, Mid-Year Report of the Department of Business Research (July 1958), p. 8.

17. Bank of Hawaii, Review of Business and Economic Conditions (April 1963), p. 3.
18. Ibid., p. 4.

Chapter III

1. Citizens' Survey Committee and University of Michigan, Citizens' Survey of Northwest Wayne County Community College Possibilities; School Survey (Ann Arbor, Michigan: University of Michigan, Bureau of School Services, February 1961), p. 16. (Mimeographed.)
2. See Leland L. Medsker, The Junior College: Progress and Prospect (New York: McGraw-Hill, 1960), Chapter 2: "The Junior College Student," pp. 29-50.

Chapter IV

1. Derived from data reported in annual reports of the Hawaii Joint Committee on Guidance and Employment of Youth, and from American Association of Collegiate Registrars and Admissions Officers, Committee on Research and Service, A Supplement to the Home State and Migration of American College Students, Fall 1958 (December 1959), pp. 38-39.

Chapter V

1. The use of the word "community" often calls attention to the public nature of these institutions.
2. Edmund J. Gleazer, Jr., A New Social Invention: The Community College (Washington, D. C.: American Association of Junior Colleges, n.d.), n.p.
3. Southern Regional Education Board, Within Our Reach, Report of the Commission on Goals for Higher Education in the South (Atlanta, Georgia: the Board, 1961), p. 10.
4. Gleazer, New Social Invention.
5. James W. Thornton, Jr., The Community Junior College (New York: John Wiley, 1960), p. 5.
6. U. S. President's Commission on Higher Education, Higher Education for American Democracy, A Report of the Commission, Vol. I (New York: Harper, 1948), p. 5.

Chapter V (continued)

7. This brief discussion of the growth of junior colleges is based on Edmund J. Gleazer, Jr., "An Introduction to Junior Colleges," in American Junior Colleges, Edmund J. Gleazer, Jr., ed. 6th ed. (Washington, D. C.: American Council on Education, 1963), pp. 3-6.
8. Wall Street Journal, December 26, 1963, p. 1.
9. Gleazer, "Introduction," p. 3.
10. Higher Education Facilities Act of 1963 (P. L. 88-129).
1. Gleazer, "Introduction," p. 5.
2. Committee of Fifteen, Community Survey of Education in Hawaii (Honolulu: Pacific Herald Publishing Co., 1942), p. 186.
3. Edgar M. Draper and Alice H. Hayden, Hawaiian Schools: A Curriculum Survey, 1944-45 (Washington, D. C.: American Council on Education, 1946), pp. 113-14.
4. Paul R. Hanna and Henry B. McDaniel, General Curriculum and Vocational Curriculum, Organization and Administration of the Public Schools, Territory of Hawaii, by the Odell Survey Staff (Stanford, California: June 30, 1957), pp. 76-77.
5. Hawaii, Governor's Committee on Education Beyond the High School, Education Beyond the High School in Hawaii, 1958-1968 (Honolulu: January 1959), p. 28.
6. Teruo Ihara, "The Upward Extension of Secondary Education in Hawaii," Unpublished Ph. D. Dissertation (Columbus: The Ohio State University 1959), pp. 1-2 of Abstract.
7. U. S. Office of Education, University of Hawaii, p. 281.
8. Hawaii, Constitutional Convention, 1950, Proceedings of the Constitutional Convention of Hawaii, 1950, "Standing Committee Report No. 52," Vol. I (Honolulu: 1960), pp. 204-05.
9. Ibid., "Committee of the Whole Report No. 11," p. 318.
10. University of Hawaii, Legislative Reference Bureau, "A Report to Members of the Twenty-Eighth Legislature on the Third Briefing Session, at Wailuku, Maui" (Honolulu: June 15, 1956), pp. 1-2. (Mimeographed.)
1. Memorandum from President Paul S. Bachman to Dr. Robert M. Kamins, Director, Legislative Reference Bureau (September 24, 1956).
2. University of Hawaii, Development Commission, p. 125.

23. Ibid., p. 81.
24. University of Hawaii, "Report from the Senate Committee to Study a Proposal for an Institute of Engineering Technology" (Honolulu: January 23, 1961), p. 1. (Mimeographed.)
25. Ibid. The result of the Regents' efforts to study the University's development culminated in the HEW report.
26. University of Hawaii, "Report of the Senate Committee to Study Proposals for Non-Degree Programs" (Honolulu: April 8, 1961). (Mimeographed.)
27. Ibid.

Chapter VI

1. Winfred L. Godwin, "Foreword" to A. J. Brumbaugh, Guidelines for the Establishment of Community Junior Colleges (Atlanta, Georgia: Southern Regional Education Board, n.d.).
2. Charles E. Odegard, "Community Colleges: Education or Higher Education," Junior College Journal 33 (April 1963), pp. 20-21. See also the discussion in Chapter IV of this report on the quality to be maintained at the community colleges (p. 64).
3. This discussion is from S. V. Martorana, "The Legal Status of American Public Junior Colleges," in Gleazer, Jr., ed., American Junior Colleges, pp. 35-37.
4. For details of this development, see Howard R. Boozer, "North Carolina is Counting on Community Colleges," Junior College Journal 34 (December 1963-January 1964), pp. 8-11.
5. North Carolina, Governor's Commission on Education Beyond the High School, The Report of the Governor's Commission on Education Beyond the High School (Raleigh, North Carolina: 1962), p. 68.
6. The State of Iowa also faced the issue of whether or not "area vocational-technical schools should be established as separate institutions and not made part of the area community college." The State Committee on Public Area Community Colleges weighed the pros and cons of establishing separate vocational-technical schools and recommended against their establishment. (Iowa, Department of Public Instruction, Education Beyond High-School Age: The Community College (Des Moines, Iowa: December 1962), p. 106.)
7. Gleazer, Jr., ed., American Junior Colleges, Appendix IV, pp. 504-34. See also the helpful article in the same edition by J. W. McDaniel and Thomas Merson, "Selecting a College and a Program," pp. 7-15.

Chapter VI (continued)

8. Leland L. Medsker, The Junior College: A Powerful Motivating Force for Educational Advancement (Washington, D. C.: The American Association of Junior Colleges, 1961), p. 11.
9. Thornton, Community Junior College, pp. 33-37 and 283.
10. Dr. Teruo Ihara's 1958-59 survey on Kauai indicated that tuition is a factor in students' decision to enroll at community colleges. (Ihara, "Upward Extension of Secondary Education," pp. 273, 279, and 283.)
11. The President's Commission on Higher Education made this recommendation. See discussion in Thornton, Community Junior College, pp. 100, 276-77.
12. Louis A. D'Amico and W. Robert Bokelman, "Tuition and Fee Charges by Public Junior Colleges, 1961-62," Junior College Journal 32 (September 1962), pp. 36-39.
13. D. G. Morrison and S. V. Martorana, Criteria for the Establishment of 2-Year Colleges, U. S. Office of Education Bulletin 1961, No. 2 (Washington, D. C.: Government Printing Office, 1960), p. 70.
14. The county of Maui consists of three islands. For purposes of this discussion on the location of a college within commuting distance, the high schools on Molokai and Lanai are omitted. Hana is not within commuting distance but its small enrollment does not alter the analysis.
15. The HEW report predicted 443 based on the 1961 graduates who numbered 739; in 1964 the graduates will be approximately 800.
16. Department of Education, Kauai District, "Study of Post High School Education Need in Kauai District" (February 1963).
17. In Hawaii, the maintenance of public school buildings and grounds, the acquisition of sites, and partial support for building construction are provided by the counties. Otherwise, the State provides the bulk of the funds necessary to operate the schools.

APPENDIX: HIGH SCHOOL SENIOR QUESTIONNAIRE

HIGH SCHOOL SENIOR SURVEY

University of Hawaii
November 1963

TO HIGH SCHOOL SENIORS:

Most of you seniors are probably wondering what you will do next year, after you have graduated from high school. Some of you will go to work, some will go to a technical school or business school, and others will go to college here in Hawaii or on the mainland.

The State of Hawaii is interested in the problem of further schooling for high school graduates. The State Legislature has asked the University of Hawaii to make two kinds of studies: one is to find out the financial needs of those who want to go to college, and the second is to find out whether there is a need for more public colleges in Hawaii.

One type of public college that is mentioned as a possibility is called a "junior college" or a "community college." A junior college or a community college offers (a) the first two years of a regular University program; (b) two-year technical programs in such fields as engineering, nursing, business, and hotel trades; and (c) specialized programs in various trades and vocations. These colleges are usually easier to get into, and are generally located so that one can live at home and not have to drive too long a distance to get to them.

This questionnaire will provide information that will be helpful to the State in planning its college facilities. You will be helping by answering the questions honestly and to the best of your ability.

This questionnaire is not a test and you are not asked to write your name. Please read the instructions carefully.

There are five sections in this questionnaire; you will answer only THREE.

Section A. All should answer these questions.

Choose one { Section B. Those who definitely plan to go to school next year.
Section C. Those who are uncertain about going to school next year.
Section D. Those who definitely plan not to go to school next year.

Section E. All should answer these questions.

Use check marks (✓) or print clearly to show your answers. Use a pencil and erase when necessary.

Your help is greatly appreciated.

SECTION A EVERYONE SHOULD ANSWER ALL QUESTIONS IN THIS SECTION. (Items 1 to 13)

- | | |
|---|--|
| 1. Name of your high school _____ | |
| 2. Sex (Check one) | |
| ____ (1) Male | |
| ____ (2) Female | |
| 3. Your high school grades are mostly: (Check one) | |
| ____ (1) A's | |
| ____ (2) B's | |
| ____ (3) C's | |
| ____ (4) D's | |
| 4. In high school, you are taking courses which are chiefly: (Check one) | |
| ____ (1) college preparatory | |
| ____ (2) commercial | |
| ____ (3) vocational-trade-technical | |
| ____ (4) general education | |
| 5. Your family: (Check one) | |
| ____ (1) owns the home in which you live | |
| ____ (2) rents the home in which you live | |
| ____ (3) don't know | |
| 6. Your family is being supported by: (Check one) | |
| ____ (1) father only | |
| ____ (2) mother only | |
| ____ (3) both father and mother only | |
| ____ (4) brothers and/or sisters only | |
| ____ (5) father together with brothers and/or sisters | |
| ____ (6) mother together with brothers and/or sisters | |
| ____ (7) father, mother, brothers and/or sisters | |
| ____ (8) family members and other relatives | |
| ____ (9) other (Explain) _____ | |
| 7. Check the number which best describes the main occupation of <u>each</u> of your parents, whether living or deceased: (Check one in each column) | |
| <u>Father</u> | <u>Mother</u> |
| ____ | ____ (1) Professional (e.g., engineer, doctor, lawyer, teacher) |
| ____ | ____ (2) Semi-professional (e.g., technician, draftsman, nurse) |
| ____ | ____ (3) Managerial or official (e.g., supervisor, store owner) |
| ____ | ____ (4) Clerical or sales (e.g., clerk, bookkeeper, realtor, salesman) |
| ____ | ____ (5) Personal service (e.g., maid, waiter, beautician, barber) |
| ____ | ____ (6) Protective (e.g., military personnel, policeman, fireman) |
| ____ | ____ (7) Agricultural, fishing & forestry (e.g., farmer, gardener, fisherman) |
| ____ | ____ (8) Skilled (e.g., baker, carpenter, electrician, mechanic, tailor) |
| ____ | ____ (9) Semi-skilled (e.g., truck, bus, or taxi driver, welder, telephone operator) |
| ____ | ____ (10) Unskilled (e.g., plantation laborer, pineapple packer, stevedore) |
| ____ | ____ (11) Housewife |
| ____ | ____ (12) Other (Explain) _____ |
| ____ | ____ (13) Don't know |

8. Check the number which best describes the education of each of your parents: (Check one in each column)

Father Mother

- | | |
|-------|--|
| _____ | _____ (1) 0-4 years |
| _____ | _____ (2) 5-8 years |
| _____ | _____ (3) 9-11 years |
| _____ | _____ (4) High school graduate |
| _____ | _____ (5) Trade or technical school graduate |
| _____ | _____ (6) 1-3 years of college |
| _____ | _____ (7) College graduate |
| _____ | _____ (8) Professional or graduate school |
| _____ | _____ (9) Don't know |

9. How many of your brothers and sisters depend on your family for support? (Check one)

- _____ (1) none
 _____ (2) one or two
 _____ (3) three or four
 _____ (4) five or more
 _____ (5) don't know

10. How many older brothers and sisters do you have? (Check one)

- _____ (1) one
 _____ (2) two
 _____ (3) three
 _____ (4) four
 _____ (5) five
 _____ (6) six
 _____ (7) seven or more
 _____ (8) none

11. How many of your brothers and sisters have gone to college (including those who are now in college)?

- _____ (1) one
 _____ (2) two
 _____ (3) three
 _____ (4) four
 _____ (5) five
 _____ (6) six
 _____ (7) seven or more
 _____ (8) none

12. Before you started answering this questionnaire: (Check one)

- _____ (1) You had thought quite a lot about college or university education.
 _____ (2) You had thought some about it.
 _____ (3) You had thought a little about it.
 _____ (4) You had thought nothing or almost nothing about it.

13. Check the one which applies to you.

- _____ (1) If you definitely plan to go to school next year, check this and proceed to answer questions in Section B.
 _____ (2) If you are uncertain about going to school next year, check this and proceed to Section C.
 _____ (3) If you definitely plan not to go to school next year, check this and proceed to Section D.

SECTION B ONLY SENIORS WHO DEFINITELY PLAN TO GO TO SCHOOL NEXT YEAR SHOULD ANSWER ALL QUESTIONS IN THIS SECTION. (Items 14, 15, and 16)

14. Check the type of school you plan to attend next year and print the name and location.

	<u>Name</u>	<u>State</u>
_____ (1) College or University	_____	_____
_____ (2) Junior College	_____	_____
_____ (3) Business School	_____	_____
_____ (4) Trade or Technical School	_____	_____
_____ (5) Other	_____	_____

15. Check the one number which best describes the field of study you expect to undertake. If none of these fits your plans, explain your field of study: _____

College Programs

- _____ (1) Liberal arts (including scientific and pre-professional programs)
 _____ (2) Business administration
 _____ (3) Engineering
 _____ (4) Agriculture
 _____ (5) Education (Teaching)
 _____ (6) Home economics
 _____ (7) Nursing

Business & Commercial Programs

- _____ (20) Accounting and bookkeeping
 _____ (21) Secretarial and stenography
 _____ (22) Office machine operation
 _____ (23) Data processing
 _____ (24) Office management
 _____ (25) General clerical
 _____ (26) Retail selling
 _____ (27) Advertising

Trade or Technical Programs

- _____ (30) Aeronautics
 _____ (31) Electronic technology
 _____ (32) Civil structural technology
 _____ (33) Drafting
 _____ (34) Mechanical technology
 _____ (35) Dental assistant
 _____ (36) Practical nursing
 _____ (37) Clothing and apparel trades
 _____ (41) Auto body and fender
 _____ (42) Auto mechanics
 _____ (43) Diesel mechanics
 _____ (44) Machine shop
 _____ (45) Building trades
 _____ (46) Air conditioning and refrigeration
 _____ (47) Appliance servicing
 _____ (48) Beautician-barber
 _____ (49) Hotel and restaurant trades

16. What percentage of your total school costs (including living expenses) do you expect to receive from each of the following sources? (Write in the estimated percentages; the total should equal 100%.)

- ☐ % (1) Money from parents
☐ % (2) Money from friends or relatives other than parents
☐ % (3) Money you will have saved before entering new school next year
☐ % (4) Money you expect to earn after entering new school
☐ % (5) Loans
☐ % (6) Scholarships
 100% Total per semester

(NOW GO TO SECTION E ON PAGE 4.)

SECTION C ONLY SENIORS WHO ARE UNCERTAIN ABOUT GOING TO SCHOOL NEXT YEAR SHOULD ANSWER ALL QUESTIONS IN THIS SECTION. (Items 17, 18, and 19)

17. Why are you undecided whether you will go to school or not? (Check one number under "Main Reason." If you have other reasons, check no more than two under "Other Reasons.")

- | Main Reason
(Check one) | Other Reasons
(No more than two) | |
|----------------------------|-------------------------------------|---|
| ☐ | ☐ | (1) Don't have or cannot obtain money |
| ☐ | ☐ | (2) Parents don't want me to go, but I want to go |
| ☐ | ☐ | (3) Don't know what occupation to prepare for |
| ☐ | ☐ | (4) No college near my home |
| ☐ | ☐ | (5) Parents want me to go, but I don't want to go |
| ☐ | ☐ | (6) May be drafted by army |
| ☐ | ☐ | (7) My high school record may not be good enough |
| ☐ | ☐ | (8) May not meet entrance requirements of school of my choice |
| ☐ | ☐ | (9) My work does not require further study |
| ☐ | ☐ | (10) Needed at home |
| ☐ | ☐ | (11) Getting married |
| ☐ | ☐ | (12) Other reason (Explain) _____ |

18. What will you do next year if you do not go to some type of school? (Check one)

- ☐ (1) Work
☐ (2) Join Armed Forces
☐ (3) Help at home
☐ (4) Don't know
☐ (5) Other (Explain) _____

19. Would you like to continue your education within the next five years? (Check one)

- ☐ (1) Yes
☐ (2) No
☐ (3) Uncertain

(NOW GO TO SECTION E ON PAGE 4.)

SECTION D ONLY SENIORS WHO DEFINITELY PLAN NOT TO GO TO SCHOOL NEXT YEAR SHOULD ANSWER ALL QUESTIONS IN THIS SECTION. (Items 20, 21, and 22)

20. Why aren't you going to school next year? (Check one number under "Main Reason." If you have other reasons, check no more than two under "Other Reasons.")

- | Main Reason
(Check one) | Other Reasons
(No more than two) | |
|----------------------------|-------------------------------------|---|
| ☐ | ☐ | (1) Lack of funds (money to go to school) |
| ☐ | ☐ | (2) My work does not require further study |
| ☐ | ☐ | (3) Needed at home |
| ☐ | ☐ | (4) No college near my home |
| ☐ | ☐ | (5) Not interested |
| ☐ | ☐ | (6) My high school record is not good enough |
| ☐ | ☐ | (7) Getting married |
| ☐ | ☐ | (8) Want more experience before continuing school |
| ☐ | ☐ | (9) Want to fulfill military obligation now |
| ☐ | ☐ | (10) Other reason (Explain) _____ |

21. What will you do next year? (Check one)

- ☐ (1) Work
☐ (2) Join Armed Forces
☐ (3) Help at home
☐ (4) Don't know
☐ (5) Other (Explain) _____

22. Would you like to continue your education within the next five years? (Check one)

- ☐ (1) Yes
☐ (2) No
☐ (3) Uncertain

(NOW GO TO SECTION E ON PAGE 4.)

SECTION E EVERYONE SHOULD ANSWER ALL QUESTIONS IN THIS SECTION. (Items 23 to 28)

23. If, in your district, there were a public two-year college to which you may be admitted, offering freshman and sophomore college courses, technical-vocational courses, and general education courses, how might this affect your plans? (Check one)

- ☐ (1) I would enroll in that institution.
- ☐ (2) I might enroll in that institution.
- ☐ (3) I would still not change my original school plans.
- ☐ (4) I would not attend that institution.

24. What is the greatest amount of money you can afford to pay per year for tuition to attend this two-year college? (Check one)

- ☐ (1) \$100 per year or less
- ☐ (2) From \$101 to \$150 a year
- ☐ (3) From \$151 to \$200 a year
- ☐ (4) From \$201 to \$250 a year
- ☐ (5) More than \$250 a year

25. In order to attend this two-year college, will you need to get a part-time job, scholarship, or loan? (Check one)

- ☐ (1) Yes
- ☐ (2) No
- ☐ (3) Don't know

26. What program would you be interested in taking at this two-year college? (Check only one)

College Programs

- ☐ (1) Liberal arts (including scientific and pre-professional programs)
- ☐ (2) Business administration
- ☐ (3) Engineering
- ☐ (4) Agriculture
- ☐ (5) Education (Teaching)
- ☐ (6) Home economics
- ☐ (7) Nursing
- ☐ (8) Other (Explain) _____

Business & Technical Programs

- ☐ (10) Accounting
- ☐ (11) Secretarial science
- ☐ (12) Retail selling
- ☐ (13) General business
- ☐ (14) Data processing
- ☐ (15) Nursing
- ☐ (16) Dental hygiene
- ☐ (17) Police science
- ☐ (18) Hotel trades
- ☐ (19) Clothing & apparel trades
- ☐ (20) Commercial art
- ☐ (21) Agriculture, general
- ☐ (22) Horticulture and floriculture
- ☐ (23) Drafting
- ☐ (24) Engineering aide
- ☐ (25) Electronics
- ☐ (26) Automotive technology
- ☐ (27) Aeronautics technology
- ☐ (28) Building trades
- ☐ (29) Other (Explain) _____

27. How do your parents feel about your continuing your education after high school, whether it be college, business school, technical school, etc.? (Check one)

- ☐ (1) They insist that I go.
- ☐ (2) They want me to go.
- ☐ (3) They leave it up to me entirely.
- ☐ (4) They don't want me to go.
- ☐ (5) They won't allow me to go.
- ☐ (6) I don't know how they feel.

28. How many adults (parents, brothers, sisters, relatives, etc.) in your family might be interested in attending this two-year college on a part-time or full-time basis? (Check one)

- ☐ (1) None
- ☐ (2) One or two
- ☐ (3) Three or four
- ☐ (4) Five or more

Thank you for your cooperation.